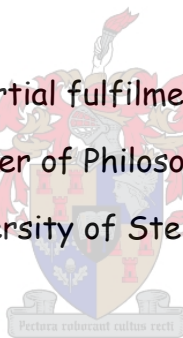


**Healing the Rift:**  
**An assessment of a World Health Organisation's**  
**media communication programme for health scientists**

Adele Baleta

Thesis presented in partial fulfilment of the requirements for  
the degree of Master of Philosophy (Journalism) at the  
University of Stellenbosch



Supervisor: Professor *George Claassen*

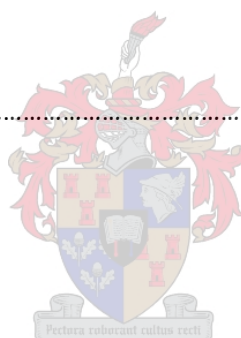
April 2006

# Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work, and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature:.....

Date:.....



# Acknowledgements

This thesis is dedicated to my mother Jackie and my late father Eric who have been a pillar of support for me and who have always encouraged me in meeting my life's challenges.

I wish to thank the World Health Organisation's Department of Immunisation, Vaccines and Biologicals for the support they have given me for this project. In this regard I would like to especially thank Dr Dianliang Lei and Dr Philippe Duclos. I am also grateful to the health scientists/professionals from South Africa, Africa and China for the time they willingly gave up to contribute to this research.

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Thanks are due to Dr Ushma Mehta for the companionship and laughter on travels to distant lands and for her unflagging enthusiasm for this study.

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# Abstract

Health scientists agree that the media is a crucial conduit for communicating life-saving, preventative and curative health messages to a wider audience. They also concur that they are the gatekeepers, and the responsibility of communicating their findings and health information to the public rests with them. And yet, their relationship with journalists is often unhealthy and in need of attention.

Many health scientists lack knowledge and understanding about who the media are, and what they require to do the job of reporting ethically and professionally. They often lack the skills needed to frame simple, succinct messages timeously, especially on controversial issues such as vaccines and drug safety, immunisation and drug treatment for infectious diseases such as HIV/AIDS. This study argues that health scientists/professionals globally, irrespective of culture, ethnicity, creed, language or media systems, need training on how to communicate with the media in the interests of public health. This is especially so in the modern world with its complex, high-speed communication.

The objective of the study was to assess the impact of a WHO media communication training programme for health scientists worldwide. More specifically, the study sought to shed light on whether the training shifted their perceptions and attitudes to the media. And, if so, in what way? It also aimed to find out if the trainees learned any skills on how to deal with reporters.

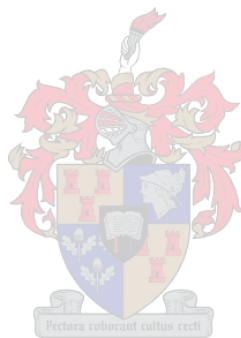
The research methodology was qualitative. A review of the literature, to establish current thinking in the field, was followed by interviews with health professionals.

The interviewees are from China, South Africa and Ghana and received the same basic training either in South Africa, China or Sri Lanka. Some were trained in 2005, others in 2004 and others before that. Most had been trained together with participants from other countries. Two focus groups were conducted in China before and after training. Included, is an account of the aims and objectives of each module of the actual training. The study also made use of WHO documents and news and feature articles from newspapers, radio and the internet.

Most participants had never had media communication training but had been interviewed by reporters. While some had positive experiences, others felt bruised by their interactions with journalists. After training, however, they registered a shift in attitude toward feeling more positive and less fearful of the media. They felt more confident and better equipped to engage with journalists. Most participants desired more training to consolidate the skills that they had learned. Some had managed to put the training to good use by developing similar programmes in their own country. Others who were trained more recently were enthusiastic about the prospect of sharing ideas with colleagues. Those who were unlikely to deal with the media directly said they felt they could at last contribute to discussions on the media in the workplace.

The WHO training, albeit a first step aimed at bridging the gap between health professionals and journalists, goes a long way in addressing the frustrations and the complexities of dealing with the media. Health professionals want to communicate because they need to reach their target population, the ordinary person in the street. Training and facilitation can empower health professionals to

deal constructively with the media in getting health messages to the public. This training programme, which imparts practical skills including how to prepare and manage interviews, could be adapted to meet the needs of scientists from different disciplines.



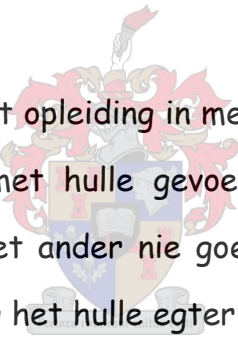
## Abstrak

Gesondheidswetenskaplikes is dit eens dat die media 'n uiters belangrike middel is om lewensreddende, voorkomende en genesende gesondheidsboodskappe aan 'n groter gehoor oor te dra. Hulle stem ook saam dat hulle die hekwagters is en die verantwoordelikheid het om hul bevindinge en gesondheidsinligting aan die publiek oor te dra. Tog is hul verhouding met joernaliste dikwels ongesond en sorgwekkend. Talle gesondheidswetenskaplikes het geen kennis en begrip van wie die media is en wat hulle nodig het om hul taak - verslaggewing - eties en professioneel te verrig nie. Hulle kort dikwels die vaardighede om eenvoudige, saaklike boodskappe betyds te formuleer, veral as dit kom by omstrede aangeleenthede soos veilige entstowwe en medisyne, immunisering en medisyne vir die behandeling van aansteeklike siektes. Hierdie studie voer aan dat wetenskaplikes/gesondheidsberoepslui wêreldwyd - ongeag kultuur, etnisiteit, geloof, taal of mediastelsels - 'n behoefte het aan opleiding om beter met die media te kommunikeer ter wille van openbare gesondheid. Dit is veral belangrik vir die ingewikkelde en snelle kommunikasie van die moderne wêreld.

Die doel van die studie was om die uitwerking van 'n wêreldwye opleidingsprogram van die WGO oor kommunikasie met die media te bepaal. Die studie het meer spesifiek probeer lig werp op die vraag of die opleiding hul begrip van en ingesteldheid teenoor die media verander het. En, indien wel, op watter manier? Dit het ook probeer vasstel of deelnemers enige vaardighede aangeleer het oor hoe om met verslaggewers om te gaan.

'n Kwalitatiewe navorsingsmetodiek is gevolg. Bestaande literatuur is bestudeer om huidige denkrigtings op die gebied te bepaal, waarna onderhoude met gesondheidsberoepslui asook 'n TV-gesondheidsverslaggewer van Beijing, China, gevoer is.

Die ondervraagdes kom van China, Suid-Afrika en Ghana en het dieselfde basiese opleiding in Suid-Afrika, China of Sri Lanka ondergaan. Sommige is in 2005 opgelei, party in 2004 en ander vroeër. Die meeste is saam met deelnemers van ander lande opgelei. Twee fokusgroepe is voor en ná opleiding in China bestudeer. 'n Verslag oor die oogmerke en doelwitte van elke module van die werklike opleiding is ingesluit. Die studie het ook gebruik gemaak van WGO-dokumente, nuus- en artikels uit nuusblaaie, die radio en die internet.

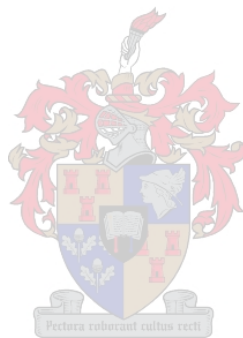


Die meeste deelnemers het nooit opleiding in mediakommunikasie gehad nie, hoewel verslaggewers al onderhoude met hulle gevoer het. Terwyl dit vir sommige 'n aangename ondervinding was, het ander nie goeie herinneringe aan hul interaksie met joernaliste nie. Ná opleiding het hulle egter getuig van 'n positiewer gesindheid teenoor en minder vrees vir die media. Die meerderheid van die deelnemers wou graag verdere opleiding hê om hul pas verworwe vaardighede uit te bou. Party kon selfs soortgelyke programme in hul eie lande ontwikkel. Van die meer onlangse deelnemers was geesdriftig oor die vooruitsig om gedagtes met kollegas te wissel. Diegene wat waarskynlik nie veel met die media te doen sou hê nie, het gesê hulle kon nou minstens by die werk aan gesprekke oor die media deelneem.

Hoewel dit maar die eerste tree is om die gaping tussen gesondheidsberoepslui en joernaliste te oorbrug, slaag die WGO se opleiding in 'n groot mate daarin om die frustrasies en verwikkeldhede van omgang met die media te oorkom. Mense in die



gesondheidsberoepes wil graag kommunikeer omdat hulle hul teikenbevolking - die gewone mense - moet bereik. Opleiding en tussentrede kan hulle toerus om konstruktief met die media om te gaan ten einde gesondheidsboodskappe aan die publiek oor te dra. Hierdie opleidingsprogram kan aangepas word om in die behoeftes van wetenskaplikes in verskeie vakgebiede te voorsien.



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## ADDENDUM

CD ROM of the WHO training course materials and photographs of trainees in Beijing in China (April 2005) and UCT (October 2004).

# Abbreviations

<b>ADR</b>	Adverse Drug Reaction
<b>AEFI</b>	Adverse Event(s) Following Immunisation
<b>AIDS</b>	Acquired Immuno-Deficiency Syndrome
<b>CCDC</b>	China's Centre for Disease Control
<b>CDC</b>	Centre for Disease Control
<b>DTP</b>	Diphtheria, Tetanus and Pertussis
<b>EPI</b>	Extended Programme on Immunisation
<b>GTN</b>	Global Training Network
<b>HIV</b>	Human Immunodeficiency Virus
<b>HRT</b>	Hormone Replacement Therapy
<b>MMR</b>	Measles Mumps and Rubella
<b>NIP</b>	National Immunisation Programme
<b>NRA</b>	National Regulatory Authority
<b>UCT</b>	University of Cape Town
<b>UNICEF</b>	United Nations Children's Fund
<b>V&amp;B</b>	Vaccines and Biologicals
<b>WHO</b>	World Health Organisation



# Chapter 1

## Introduction

*"A health science researcher's job is not over until the research findings have been peer reviewed, published, and transmitted to health policymakers and the general public ... However, researchers are seldom trained to fill these roles, and in developing countries where literacy levels are low and science journalism is not well established, communicating research findings to the general public poses a considerable challenge" (John Khanna, 2001: 50).*

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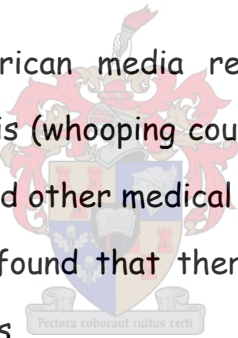
The media has become the main source of adults' information about science and more particularly health science research and its application because no other area of journalism touches the lives of so many news readers and viewers as much as health (Rubin & Rogers, 1993).

Reports on television, radio, the internet and in the press can have a major influence on public health policy and the public's knowledge and opinion about health and science. Information and advice written by journalists can even result in people changing their behaviour which in turn can have a beneficial or negative impact on their health and welfare (Harrabin, Coote & Allen 2003). The power of

the media is such that lives can be saved or lost depending on the information that is disseminated.

Media coverage in the United Kingdom in 2002 of the erroneous causal link made by medical researchers between the triple vaccine of measles, mumps and rubella (MMR) and autism, a pervasive developmental disorder, led to widespread refusal of the vaccine by parents for their children in the UK (Day, 2005). Consequently, measles infections soared and children died. The "vaccine scare" spread to other countries via reports in the media. It has since been shown that there is no causal link between the MMR vaccine and autism.)

Similarly, in 2000, South African media reports (Baleta, 2002) linked the diphtheria, tetanus and pertussis (whooping cough) (DTP) vaccine to the deaths of two children. After autopsies and other medical investigations were ordered by the Department of health, it was found that there was no causal link between the vaccine and the children's deaths.



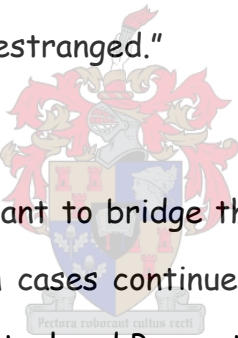
The upshot of these stories was the loss of public confidence in immunisation programmes, the exposure of children to serious, life-threatening infectious diseases and the loss of trust in public health scientists and officials and the media.

Scientists and the media have the public interest as a common bond. Health researchers/officials need journalists to convey health information to the public and the media need health professionals as a source of information for their

stories. Both parties understand this but, in many cases, there is a problem. (Rubin & Rogers, 1993: 1).

"Mistrust and misunderstanding infect many members of the medical profession" when they interact with the news media while "cynicism and scepticism afflict many members of the media when they encounter health professionals" in the course of their work.

Research has shown that a wide chasm exists between the media and health scientists. The standoff between the professions threatens the public's understanding of health risks. As Rubin and Rogers (1993: 2) contend, "with such a great need for information, how sad that the two institutions with the talent and technology to provide it, are so estranged."



Studies show that both sides want to bridge the gap between them but a lack of knowledge of the other in both cases continues to keep them apart. Director of the US Centers for Disease Control and Prevention, Dr David Satcher, agrees that there are greater incentives these days for doctors to learn how to communicate better with reporters (Rubin & Rogers. 1993: 13). He says: "Today, the ability to communicate with patients and reporters is as valuable and vital a tool as a stethoscope."

How can the conflict between the two parties be resolved? Claassen (2003), talks about the need for a process of mutual education to clear up misunderstandings and misconceptions between the media and scientists. This is echoed by health scientists (Gething, 2001) with the South African Medical Research Council who

have appealed for training on how to communicate with journalists so that more of their research can find its way into the public domain.

The World Health Organisation's (WHO) Global Training Network (GTN) regards the media as a major partner in public health delivery and concurs that learning to communicate with journalists is fundamental to the success of public health interventions. But, it has gone a step further. In 1999, when it conceived of a global training programme for health professionals, to ensure the safety of vaccines and their safe administration, it included media training as an essential component to the course.

According to GTN coordinator Dr Lei Dianliang (2005), the training programme which aims to set up and strengthen National Immunisation Safety Surveillance Programmes worldwide with developing countries as the priority, has since been conducted in over 74 countries with 277 participants. The WHO has, to date, set up four training centres worldwide, namely in Russia, Sri Lanka, Tunisia and South Africa.

The author, a health writer and editor, has been a facilitator and trainer for the media component of the course since the launch of the training in 1999 and together with colleagues co-wrote the training materials for the course. A description of the training, its objectives and goals is included in this study.

The core of the thesis, which is an assessment of the impact of the media training programme, has never been done before, making this MPhil research innovative. The WHO has not assessed any part of the training programme to date. Hopefully,



this is a critical first step in an evaluation process that is needed before the training, which is co-ordinated from WHO's Geneva headquarters, is devolved to regional/country level. The thesis is meant to provide a "snapshot" of the impact of the science communication training programme.

The relevant staff at the WHO's Vaccines and Biologicals Unit, under which the GTN training programme falls, have given their support for this research.

The aim of this study is to establish whether the media training programme has any impact, whether it makes a difference to the participants' - drug regulatory authorities and immunisation programme managers - understanding of and attitude toward the media and whether they feel it will help them (or has helped them) deal more effectively with the media in the future in the interests of public health.

To achieve this, participants (those who had undergone the training or who were exposed to the training) were asked a number of questions before and after the training to see if the programme had led to a shift in their perceptions and understanding of the media.

Questions included:

- What their attitude to and awareness of the media was before and after the training?
- What their experiences of the media (positive and/or negative) were before the training or since the training more specifically with regard to participants who had been trained some time ago?

It was hoped that the information could also provide some indication to the WHO and the author of what the participants' training needs are *vis a vis* dealing with the media and establishing communication and crisis communication plans.

So, they were asked:

- What they thought should be taken out of the course and what should be left in?
- They were also asked whether they had learned any skills, and if so, what they were?

The main objective of the training is not to make journalists out of scientists but to assist participants in becoming more aware of how the media work, what their needs are and what their role and responsibility is. In this regard, it's hoped that the trainees will be able to develop better working relations with the media especially during times of crises, when adverse events (reactions) occur after immunisation.



The thesis consists of seven chapters.

1. The **first chapter** is this introduction which gives an overview of the research topic.
2. The **second chapter** is a literature review which addresses: the importance of science in the modern world; the role and duty of the media to keep the public informed about science, particularly health sciences, and the role and responsibility of scientists to communicate effectively with the media which is the information pipeline connecting scientists with the public. It also looks at three landmark studies which highlight the wide gap that exists between the two professions and gives recommendations to improve the relationship.

3. **Chapter Three** gives an historical overview of the relationship between medical science and the media with regard to vaccination - an essential part of public health programmes. The challenges facing scientists and the media in communicating thorny issues around vaccination are examined, with particular reference to vaccine safety.
4. **Chapter Four** elaborates on vaccine safety within the context of developed and developing countries. It sets the scene and gives the rationale for the WHO's decision to launch its training programme.
5. **Chapter Five** introduces the methodology, the aims and objectives of the training materials and the methodology of the impact assessment.
6. **Chapter Five** and **Chapter Six** present the findings and the voices of the trainees and facilitators that have been exposed to the training.
7. **Chapter Six** presents the pre-training findings and **Chapter Seven** discusses the impact of the training.
8. **Chapter Eight** concludes the study and gives recommendations for future training.
9. References and appendices are included as well as an addendum in the form of a CD ROM.

# Chapter 2

## Literature Review

### 2.1 Introduction

The first part of the literature review outlines the importance of scientific endeavour in the modern world and the role of effective communication of science and technology to ensure a technologically literate society. The media, as message bearer, is the vital link between scientists and the public and the means by which scientists reach the public. Information needs to be clear and accurate, especially in the area of biomedical sciences, so that ordinary people can make the best choices possible about their health. The relationship between scientists and the media is however, at best good and at worst hostile. The scientists whose research is publicly funded have a duty to inform the public of their research and the journalists have a responsibility to accurately reflect this work. The second section of the review describes three studies that investigate the attitudes that scientists have toward journalists and vice versa with a view to understanding what needs to be done to heal the rift between the two professions.

---

*"Science has saved my life; not just that, scientific methods and discoveries ... have saved my life. If we were to back off from science and technology, we would be condemning most of the human population of the Earth to death." - Carl Sagan as quoted in Hartz and Chappell (1997).*

## 2.2 Crossing boundaries

Science and technology is an integral part of our modern existence, it underpins everything we do. Good science fires imaginations and opens up new horizons. It crosses boundaries; it is not confined by the artificial divides of disciplines, faculties or institutions but creates partnerships to pursue knowledge (Baleta & Cowling, 2003).

In our lifetime there has been an "outright explosion" of new scientific knowledge. No-one can know it all, not even scientists, many of whom admit they are hard pressed to keep up with cutting edge research in their own specialities (Hartz & Chappell, 1997: ix).

Individuals, who may have only studied basic science at school, are likely to find the world of science a mystery, scientists intimidating and their scientific vocabulary and work incomprehensible. (Corfield, 2003).

"The public are overawed by scientists and have no confidence that they will be able to understand such complex work - 'hey, I never understood all that stuff at school, why should I understand it now?'".

Getting (2003: 7) says "When it comes to the average person there are few ways they can remain current in scientific developments after they leave school except through the media."

The public has very little idea of the range of styles in scientific work, the part that imagination plays, the creativity required and the endless long days of hard

work and patience that is necessary for discovery. If science is to be integrated properly into our culture, scientists need to learn to communicate to the public what they do on the job. (White, Evans, Mihill & Tysoe, 1993: viii).

Recently, there has been mounting emphasis worldwide on demystifying the seemingly mysterious world of scientific research of "white lab coats, microscopes, oscilloscopes and telescopes into comprehensible everyday language" (Corfield, 2003: 2).

It's only through making science accessible to the public in easy-to-understand language that the applications and implications of new discoveries can be grasped.

As James Watson (quoted in Corfield, 2003: 2), who together with Francis Crick brought to light the DNA double helix five decades ago, said:


"...science is not done in a vacuum and should not be pursued as if it could be. Good science always affects social context, and the practical effects of good basic science are often the most wide-ranging of all."

Corfield (2003: 2) goes on to say that when science is translated from techno-jargon into street speak, people can review the controversies, the claims and counter-claims and the benefits and risks of new applications and technologies. It is scientists' responsibility to take the critical first step of making sure that their findings are communicated accurately and clearly to the media, so that their research can make the transition from the lab bench to the park bench. (Gething, 2003).

## 2.3 Health and Biomedical Sciences

The media is a crucial player in the relationship between scientists and the public, acting as an information highway between the two. Krieghbaum (1967: 5) points out that "If the public is to make wise and intelligent choices, it needs to know its science now, and the most accessible way for it to get this is from printed media, radio, television, and film."

Others (Phillips, Kanter, Bednarczyk & Tastad, 1991, Claassen, 2003, Nelkin, 1995, Radford, 1996, Hartz & Chappell, 1997) agree that the media is the conduit through which scientists and researchers communicate with the public and recognise that health science and biomedical research is of particular interest to the public.



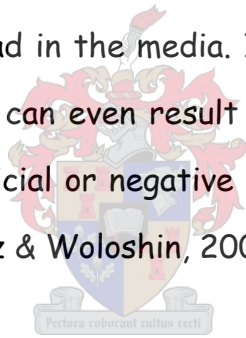
Everyone is a health consumer after all. There is no area of journalism - not the coverage of politics or government or sports or fashion, food and the arts - that touches the lives of so many news readers and viewers (Rubin & Rogers, 1993: 1-2).

Over half of American adults report that they follow health news closely; only community events and crime get more attention. The media is well positioned to educate the public about health and health risks and about what medicine can and cannot do (Schwartz & Woloshin, 2004: 226).

The flow of information however, between the laboratory bench and park bench is not as smooth as everyone would like it to be because of real and perceived misunderstandings and misconceptions between scientists and the media (Khanna, 2001).

Ultimately, the more estranged the relationship between the two, the more the public stands to lose out on credible, accurate information and this could adversely affect their health. Not only good health but life itself may depend on the communication of credible information. Krieghbaum (1967: 8) put it most succinctly when he quoted the US President's Commission on Health Disease, Cancer and Stroke: "It has been said that knowledge is power. In health, it is the power of life and death."

The media, therefore as the pipeline between science and the populace, can be very influential. The priorities and decisions of health policy-makers are often shaped by what they see, hear and read in the media. Information and advice covered by the print and electronic media can even result in people changing their behaviour which in turn can have a beneficial or negative impact on their health and welfare (Harrabin *et al*, 2003, Schwartz & Woloshin, 2004).



By way of illustrating the power of the media to influence policy makers Claassen (2003) refers to a study conducted by Loughborough University in the United Kingdom which found that politicians acquire nearly all their information from the press and not from academic publications.

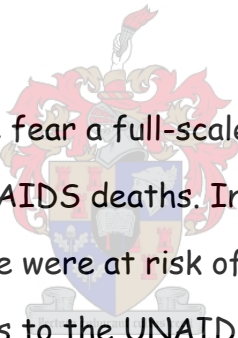
## 2.4 Need to know

Today, there has never been a more pressing need for the public to understand science, for scientists to communicate better, for the public to make choices about what science has to offer in their daily life and for them to participate in the



scientific process. That's according to former Medical Research Council (South Africa) head Professor Malegapuru Makgoba. He says (as quoted in Gething 2003: 1) "No examples illustrate these challenges and dilemmas better than the revolution in biology (the human genome project) and the HIV/Aids epidemic that is sweeping sub-Saharan Africa."

Arguably one could add a lot more to Professor Makgoba's list. Bold headlines in the media all over the world shout out urgent new health emergencies, from necrotising fasciitis ("Killer Bug Ate My Face") to avian influenza (Bird Flu). What is the public to make of headlines that potentially could cause panic? Reporters want answers from scientists to address the public's concerns.



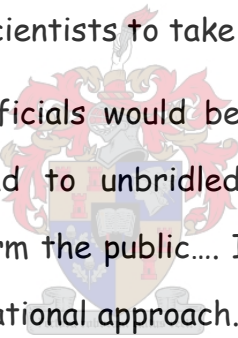
Public health officials worldwide fear a full-scale avian flu epidemic in humans that could outstrip the number HIV/AIDS deaths. In 2005, a WHO official predicted that 100 million people worldwide were at risk of dying if and when the disease mutates to humans. Compare this to the UNAIDS/WHO (2005/December) estimates that Acquired Immunodeficiency Syndrome (AIDS) has killed more than 25 million people since it was first recognized in 1981 and is regarded as one of the most destructive epidemics in recorded history.

The WHO (WHO (B), 2006) reported that there were 175 cases of avian flu and 95 deaths in humans as at end November 2005.

In South Africa, which is already bowing under the pressure of HIV/AIDS cases, there are concerns that the country will be hit by an avian flu epidemic caused by the H5N1 virus (avian flu) because the country is on the flight path of migratory

wild birds from Asia who are known to carry a mild form of the pathogen. Apart from health, there are serious commercial concerns as the country has lost millions of Rand after the European Union, Hong Kong, Singapore and Mozambique banned ostrich imports in 2004 after an outbreak of avian flu. Before the ban, South Africa supplied about 70% of the world's ostrich meat (Sapa-AFP, 2005).

Pofessor Barry Schoub (2005), Director of the National Institute for Communicable Diseases, fielded radio callers concerns on a South African public radio station saying that there is a fine balance between raising issues and awareness among the public about the dangers and risks of avian flu and creating unnecessary panic. He took the opportunity, while on radio, to outline the responsibility of public health scientists to take leadership. He says:



"We as public health officials would be lacking in our duty if we allowed concerns to lead to unbridled panic... the media is an important vehicle to inform the public.... Information is powerful and drives people to a more rational approach. We hope that there will be no epidemic. We want people to be prepared so that if it (human avian flu outbreak) does happen, we can minimize the damage".

The avian flu warnings come hot on the heels of the intensely publicised outbreak of Severe Acute Respiratory Syndrome (SARS) that quickly encircled the globe to infect over 8, 000 people with a rapidity illustrated by a 78-year old woman carrying the infection from Hong Kong to Toronto in Canada and precipitating a chain reaction causing more deaths (Ritvo, Kumanan, Willms & Upshur, 2005, Howard, 2000).

The media coverage of SARS led to more than 700 deaths. This is devastating but not when one compares this figure to the fact that one in four deaths in South Africa are HIV/AIDS-related, (Baleta, 2005) or that three million people died of AIDS globally in 2002 and 2005. (UNAIDS/WHO, 2005: December).

Stories on front pages or at the top of news bulletins kept the SARS saga blazing. *Time* magazine (Lemonick & Park, 2003) commented that "the deadly respiratory illness may have started in a rural province of China, but its impact - economic and otherwise - is rippling around the world, spreading even faster than the virus that causes it".

The story proved that the media is so powerful it can spread panic faster than a virus can infect populations.



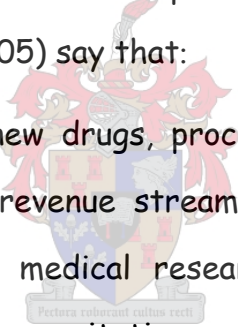
Technological advances have ensured that news travels fast and accurate information responsibly covered by journalists is needed to pre-empt panic and scare mongering. As Howard (2000) says, in the long term, the communication process is able to place diseases in proper perspective.

"Even though human cases of Ebola virus infection had not reached the shores of the United States, a global village message stressed that whether it is Ebola or West Nile virus, what happens in Zaire or the Sudan today may well be a US problem tomorrow. 'We live in a global village' and 'diseases are only a plane flight away', are messages that everyone can understand."

Public health officials and scientists need to be available to communicate with the public to ensure their safety by preparing them for any health threat. As Professor Schoub (2005) has suggested, it is public health officials' responsibility to communicate with the public to prepare for a possible epidemic and to ensure that unnecessary panic, which is likely to put lives at risk, is not created.

## 2.5 Hostility

Everyone has a stake in health: the public wants information on health and medicine, the media want stories that sell and health officials need to get curative and preventative messages across to the public. For health care industries, Van Der Weyden and Armstrong (2005) say that:



"Favourable reports on new drugs, procedures and treatments may translate into improved revenue streams from increased sales and rising share values. For medical researchers, media reporting of research findings enhances citation rates and boosts the public profile of their research institutions".

The news and medical professionals could play a meaningful role by providing in-depth answers to the complicated controversial questions that threaten to confound public understanding, but this often does not happen.

Instead, "mistrust and misunderstanding infect many members of the medical profession" when they deal with the media. At the same time, "Cynicism and scepticism afflict" the media when they approach health-care officials or researchers in the line of their work (Rubin & Rogers, 1993: 1).

The media often blame scientists for being arrogant, inaccessible and impatient in explaining their work. Some journalists do not like the idea of showing scientists their report before it goes to press. Some scientists on the other hand, fear the press who they see as ignorant, deadline-driven, impatient, sensationalist and inaccurate. It's ironical that the two professions that appear to have so much in common - the public interest - are seemingly so polarised.

The media in a democracy will argue in favour of covering stories on the principle of the public's right to know or because it is in the public's interest. Schoub (2003, December) points out that:

"Most would agree that the media have an implicit contract for the public good. Where there would be disagreement is what constitutes the 'public good'. What should be incontrovertible is the one human activity which depends so critically on social responsibility to achieve its goals, public health ...."

The image shows a faint, large watermark of the University of Cambridge crest in the background of the text. The crest features a shield with four lions, a cross, and a book, topped with a crown and a lion. Below the shield is a motto scroll.

Radford (2004: 301) believes that scientists and journalists are looking for two different things. He says:

"Both are concerned to find the truth. But the scientist wants an answer however, dull. The journalist would rather find a story. Both findings have to withstand the test of time. But the time in each case is different. That is why scientists spend five years or five months on a complex and profound piece of research that then takes five weeks to write up and another five months to finesse through the editorial board of a learned journal. And then journalists come

along the next morning, ring them up, and spend five minutes asking them what the hell it means.

"What journalists write goes into a newspaper five hours later and the next morning a reader picks it up and comes across a term like *mitochondrian* or *functional genomics*, and stops reading, all in a fifth of a second, to go onto something else, perhaps something enjoyably disgraceful involving a politician and a call girl or a famous footballer and a fracas with the police."

While media and science are bonded by the public to a large extent, the process of serving the public is so different because of the difference in culture between the two professions. The relationship between the two needs healing.



## 2.6 Confusion

Journalists and doctors agree that they share the weighty responsibility of ensuring that the public is not misled (Rubin & Rogers, 1993: 18) and that ultimately they need to learn to communicate better with each other first before they can deal with the public.

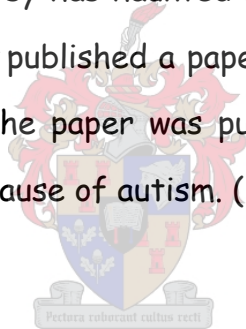
Corfield (2003: 2) points out that;

"Science itself is not good or evil, it is neutral, and the advantages and disadvantages, the opportunities and threats stem from its applications, which may lie in the hands of an uninformed public, or of

people who do not have the best interests of sections of society in their hearts or who, at best, may believe that the population is ignorant and that decisions should be made for them."

There have been several noteworthy cases where the best interests of the health of society do not seem to have been taken into account by either science, public health or the media. These include the Measles Mumps Rubella (MMR) vaccine row, the Hormone Replacement Therapy (HRT) crisis, the South African HIV/AIDS treatment battle and the genetically modified food debate.

The MMR vaccination controversy has haunted British public health officials since the medical journal *The Lancet* published a paper by Dr Andrew Wakefield (1998). At a press conference after the paper was published Wakefield suggested that MMR might be implicated as a cause of autism. (Day, 2005).



The lay press picked up the story. The causal link between autism and MMR was stated as a fact in the ensuing media frenzy, resulting in doctors' uncertainty about the safety of the vaccine and parents refusing to have their children immunised against the serious infectious diseases (Elliman & Bedford, 2001).

MMR uptake has fallen to as low as 60% in some areas in the United Kingdom as a result. Children have become vulnerable to infection and there have been deaths reported in the country as a result of children contracting measles, a vaccine preventable disease. The vaccine scare spread through press reports to other countries causing consternation among parents.



The so-called link between the vaccine and autism has since been scientifically refuted. In addition to research published in the *Journal of the American Medical Association (JAMA)* and the *British Medical Journal* in 2001, a UK study of 5000 children published in *The Lancet* in 2004 (Smeeth, Cook, Fombonne, Heavey, Rodrigues, Smith & Hall, 2004) and a Japanese study of more than 31,000 children (*Journal of Child Psychology and Psychiatry*, 2005) have subsequently found no good scientific evidence to support a link between MMR vaccine and autism.

*The Lancet's* editor Richard Horton, in 2003, announced to the media that he regretted the decision to publish Wakefield and his colleagues' paper. He said the study was flawed and that Wakefield, the lead author, had a serious conflict of interest. It emerged that Wakefield was carrying out a second study, paid for by the Legal Aid Board to find out if parents, who claimed their children had been damaged by MMR, had a case. Some children were involved in both studies.

In spite of setting the record straight, anti-vaccination groups continue to wage a war in the press over the issue. They still believe there is a causal link. They are focusing media attention on the wisdom of giving children three vaccines in one go and are rejecting the diphtheria, tetanus, and pertussis (DTP) vaccine because it contains a mercury containing preservative thiomersal. The latter is a sodium salt of ethyl-mercury and has been used for 60 years (Watts, 2004).

So who is to blame for the confusion that has left parents wondering whether or not to vaccinate their children? Fitzpatrick (as quoted in Guldberg, 2004) suggests the original Wakefield study was insubstantial and speculative. The proliferation of



"junk science" on the internet and elsewhere by journalists and anti-vaccination lobbyists, who actively seek press coverage, helps to keep the row ablaze.

He argues that politics is also behind the scare saying that the MMR campaign has raised fears over public health intervention, "because the government has taken a leading role in promoting these sorts of scare campaigns: around issues such as HIV/AIDS, sun-related skin cancer, 'mad cow disease', deep-vein thrombosis [DVT] and more".

Bad science writing, like bad science, can sell to an ignorant public, says Anton and McCourt (1995: 12) and one can't help feeling that this is what happened in the MMR case. All parties should take responsibility.

The MMR affair prompted a great deal of speculation about the role of the media in fuelling health scares. In retrospect, it could be argued that the mass media should have as a matter of course sniffed out conflicts of interest and not merely have accepted the findings at face value.

It also led to a revealing survey conducted by researchers at the Cardiff University School of Journalism in the UK (Hargreaves, Lewis & Speers, 2002). They investigated media coverage of three scientific issues with social policy implications: climate change, cloning and genetic medical research and the MMR vaccine. They reviewed 561 newspaper, radio and TV stories on MMR published during 2002. They also did two national surveys involving more than 1000 people.

The authors found that more than 50% of the British public wrongly believed that medical science was split down the middle about the safety of the MMR vaccine. Although almost all scientific experts rejected the claim of a link between MMR and autism, 53% of those surveyed at the height of the media coverage assumed that because both sides of the debate received equal media coverage, there must be equal evidence for each. Only 23% of the population was aware that the bulk of evidence favoured supporters of the vaccine.

While many of these stories featured the case for a causal link and the case against it, what didn't come across was the huge imbalance between the strengths of the two cases. The researchers said that the sheer frequency with which the alleged autism link was reported led many readers to conclude that doctors themselves must be having a real debate about it. And if there wasn't a debate, why was it reported so often?



Day (2005) says the reporting of the MMR controversy is an example of the "myth balance" in news coverage:

"Showing both sides of the story - often considered a hallmark of good reporting - does not guarantee objectivity or accuracy. This is not to say that such coverage somehow lacks legitimacy however. The processes by which news is produced and disseminated are very different to - and often incommensurable with - the processes by which scientific knowledge is generated. In a debate as complex as that about MMR, suffused as it is with politics, economics and ethics, there is no 'right' way to report the issue."

The authors (Hargreaves *et al*, 2002) said that for them the most worrying, was the lack of trust felt towards the primary conduits of information: the mass media, business and Government:

"Our research suggests that everyone involved in science communication needs to raise their game, and to adopt intelligent, multi-media strategies, rather than point the finger at the other."

The coverage and confusion surrounding the premature halting of the Women' Health Initiative (WHI) study (2002) due to concern about the risks of long-term use of combined oestrogen and progesterone HRT in post menopausal women is another example worth looking at.

The findings of the interrupted study were printed in the media before the peer reviewed article appeared in the *Journal of the American Medical Association* (Women's Health Initiative, 2002). This sequence of events, according to the journal editor, Catherine DeAngelis, caused great panic and confusion for women who were using HRT at the time (Fontanarosa & DeAngelis, 2002).

The US National Institutes of Health suspended the study after it revealed small increases in the incidences of invasive breast cancer, coronary heart disease, stroke and pulmonary embolism.

An embargo breach triggered by a story released by the *Detroit Free Press* in the United States, disrupted plans for dissemination of the WHI findings. Many electronic news services and major newspapers became aware of this report, assumed that the embargo had been broken, and also ran their stories. All this took

place before a scheduled press conference to explain the findings and more importantly before physicians (and women who took part in the WHI clinical trials and others) had access to the full JAMA report. Consequently, many physicians were caught off guard when they were flooded with telephone calls from patients, who expressed concern about the study findings, even before the physicians could have read the full article (Fontanarosa & DeAngelis, 2002).

Many women stopped taking HRT without understanding the implications of the study. This led them to re-experiencing severe menopausal symptoms (Women's Health Concern, 2005). The story spread quickly

In Australia (McEwen, 2003) a press release written about the WHI study by a doctor of the Cancer Council in New South Wales quoted a 26% increase in the risk of breast cancer but he did not cite the rates (per 10,000 women). This was quoted in the media, causing unnecessary alarm. At the time, it was estimated that 600,000 women were using some form of HRT and many of them picked up the message that 26% of them would develop breast cancer.

The scientific study itself has been criticized for being flawed. While the risks of HRT were flagged in the media, the benefits - one of which is the relief of intense menopausal symptoms - were downplayed.

It's worth noting at this juncture that the question of when to release information to the public is a bone of contention between medical journals and the lay press. The details for the purposes of this paper are not necessary. Simply put however, medical journal editors subscribe to the Ingelfinger rule which slaps an embargo on

articles until they have appeared in a peer reviewed journal, thereby giving the journal editors first grab at cutting edge research.

Scientists that go to the mass media first with their findings risk not having their research published in prestigious journals and, more importantly, without peer review, they run the risk of putting in the public realm research that has not gone through a rigorous process of scrutiny and therefore could be erroneous. The mass media, however, argues that the Ingelfinger rule violates the public's right to know.

In this regard it may be worth mentioning what is well known as the Cold Fusion case which seemed to "stand science on its head, not only because it was played out in the popular press without the ritual of peer review" but also because scientists were and some still are divided on the issue ( Goldstein, 2005).

In 1989, two scientists from Utah University in the US, Stanley Pons and Martin Fleishmann, claimed to have produced a fusion reaction at room temperature paving the way for their claim to have discovered the energy of the future.

However, fearing they were about to be scooped by a competitor and with the encouragement of their own administration, they held a press conference to announce what seemed to be the scientific discovery of the century before their work was critiqued by their peers

"What followed was a kind of feeding frenzy, science by press conference and e-mail, confirmations and disconfirmations, claims

and retractions, ugly charges and obfuscation, science gone berserk. For all practical purposes, it ended a mere 5 weeks after it began, on May 1st, 1989, at a dramatic session of The American Physical Society, in Baltimore" (Goldstein, 2005).

At the society meeting, three scientists critiqued the so-called discovery so successfully that Cold Fusion was cast right out of the arena of mainstream science along with Fleischmann and Pons, who were discredited.

Shermer (2002: 7) says it is a spectacular example of a false positive in science which, if the findings had not been made so public before corroboration from other scientists, would have been nothing out of the ordinary. The interesting point is that like the anti-vaccination lobbyists discussed above, 'Cold Fusionists' today believe Pons and Fleischmann were on the right track.



South Africa has been at the centre of an ongoing row between the Department of Health, AIDS activists and dissidents about how to treat people living with HIV/AIDS. The disease has long been a political football with opposition parties having entered the fray. The author has covered HIV/AIDS over the years and believes it's a challenge for journalists to write responsibly about how people living with HIV/AIDS are affected because editors, under pressure to make profits, want stories about the schisms, and the more controversial the better.

The dissidents do not believe HIV causes AIDS and emphasise that diet alone and nutritional supplements is the correct way to treat symptoms. While AIDS

activists, spearheaded by the Treatment Action Campaign (TAC), acknowledge the part vitamins play in boosting the immune system, they are at the forefront of lobbying for antiretroviral (ARV) drugs which they say are lifesaving although they do have side effects.

The TAC took the Department of Health to court between 2001 and 2003 forcing it to roll out the ARVs to people that need them. The delivery of the drugs has been complicated by, among other issues, a lengthy drug tendering process, the cost of drugs, the complexity of treatment regimens, lack of staff and infrastructure, the need for monitoring of drug resistance and lack of patient's adherence to the drugs. HIV/AIDS has become highly politicized with opposition parties using every opportunity to lash out at government on its apparent lack of leadership on the matter. Meanwhile, ordinary people are dying while waiting to go onto ARV treatment.



To make matters worse, the Ministry of Health, which is committed to providing free antiretroviral drugs at public facilities, strongly punts nutrition as a way of treating the disease. Health Minister Manto Tshabalala-Msimang, a medical doctor, has notably refused to publicly distance herself from the assertion by the Rath Foundation that AIDS can be cured by vitamin supplements alone.

Leader of the foundation and self-styled vitamin guru German national Matthias Rath is peddling his vitamins as a panacea for HIV/AIDS in South Africa's indigent townships while at the same time dismissing antiretroviral therapy as poisonous. His vitamin doses, however, are too high for nutritional supplements and have not been registered with the Medicines Control Council (Thom & Bodibe: 2005). The



health minister's stubborn refusal to admonish Rath has led to an outcry in the newspapers by medical professionals and the TAC who have demanded an investigation by the Medicines Control Council.

The risks and benefits of ARV need to be explained to the public via the media so that expected side effects cannot be used by non-scientists to manipulate people.

The lay press (Thom, 2005) reported that two women had died within three weeks of being convinced to stop taking their ARVs in favour of Rath's vitamins. The Medicine Sans Frontier spokesperson said that Rath's vitamin campaign was aggressive and causing lots of confusion. Without clear communication about ARV's and the role of vitamins and nutrition in addressing HIV/AIDS, the treatment option will continue to confuse and polarize people and tragically cause more deaths.



Cloning and genetically modified (GM) crops are topics that lend themselves to sensationalist reporting which conjures up fears in ordinary citizens' minds of, as (Corfield, 2003) puts it, the "Boys from Brazil" or "Frankenstein foods". But how safe are GM crops? Is Europe justified in turning them down and should "starving" African countries ban them? Should the public believe the "green" lobby groups over the scientists and has the media given all sides of the story? Who should they trust?

Public debate on important issues like those described above is probably best served by media coverage that presents all views and encourages thoughtful discussion rather than polarisation. The media have a duty to represent all views



but as the Cardiff study showed, equal coverage to unscientific and unproven information may do more harm than good. One could argue the same case for coverage of dissident views on HIV/AIDS.

Given the above it seems clear that effective science communication should be recognized "as a necessity, not an optional extra in the lives of scientists and the media" (Corfield, 2003).

The media on the one hand are gatekeepers in that they can decide whether or not to carry a story and how to frame messages but scientists are also gatekeepers because in their hands lies the responsibility to convey their findings to journalists in a comprehensible way so that their research and its implications can cross the boundary that separates scientists from the person in the street.

## 2.7 The scientist's role and responsibilities



Khanna (2001: 51) points out a health researcher's job is not over until the research findings have been peer reviewed, published, and transmitted to health policymakers and the general public.

And Claassen (2003) gives five good reasons for why scientists should learn how to communicate, namely:

- public accountability
- influencing policy-makers and practitioners
- stimulating additional funding for research

- Encouraging collaborative work and research and
- Better control. "The better the communication message about research, the greater control scientists can have over their research by way of funding, implementation of research results and the continuation and expansion of research into a wider field."

There are scientists who know the value of the media for their work. They try to attract press attention for a variety of reasons - to influence public views, to attract funds, or to establish their competitive position in "hot" fields of research (Nelkin, 1995: 129).

In the United States science reporting affects how billions of dollars of government and private money are invested. Science reporting also has an impact on the decisions of researchers and institutions (Anton & McCourt, 1995: 3).



Nelkin (1995: 145) says scientists complain of sensationalism and oversimplification.

"While they want their work to be covered by the press, they are constantly concerned about how it is covered, and this concern has led scientists and institutions not only to promote science through public relations, but also to control journalists' access to information".

Scientists are also reluctant to tolerate independent analysis of the limits or flaws of science, or the relative costs or benefits of new technologies. Nelkin (1996: 1602) says:

"They assume that the purpose of science journalism is to convey a positive image; they see the media as a means of furthering scientific and medical goals. Most journalists however, do not see themselves as trumpets for science, and many are beginning to suspect promotional hype."

Journalists are beginning to ask probing questions about the social and ethical implications of science. This is what the job should be about.

While many doctors may agree that journalists may sometimes be sloppy and sensational in their coverage of health care, doctors and researchers should also, as we have seen above, have real reason to help journalists do their job well (Schwartz & Woloshin, 2004: 226).


There are times when policy makers and the public want answers but instead of always reacting, scientists would do well to take up the science cudgel and inform people on their own initiative. Much scientific research is publicly funded and the profession owes it to the public to communicate with them about this work.

Hartz and Chappell (1997: 113) say that not all research will make the front page, but "science" as a profession should make every effort to help the rest of the world, through the media, understand what the really important discoveries are.

They go on to say that:

"If scientists really believe ... that journalism is not covering their work wisely or well, then it is incumbent on them to reach out to improve matters. Journalists may be many things but they are not mind readers. Just as scientists expect journalists to improve the quality of their reporting and route out charlatans, so should scientists name their own who are frauds for hire or ... those who can find 'significance' when none really exists. It's called 'junk science' and every good scientist knows about it."

## 2.8 The journalist's role and responsibilities



Schwitzer, Mudur, Henry, Wilson, Goozner, Simbra, Sweet, & Baverstock, (2005) say, some journalists' primary concern is accurate and clear reporting. They are less concerned about the consequences of their story once it is published. But, they suggest this approach may end up in "shoddy journalism" and potential harm to the public. Schwitzer (as quoted in Schwitzer *et al*, 2005) asserts that:

"It isn't sufficient to be accurate and clear when covering health news. Journalists have a responsibility to mirror a society's needs and issues, comprehensively and proportionally. Often that doesn't happen in health news."

Schwitzer goes on to say that reporters have a special responsibility in covering health and medical news.

"It is not the role of journalists to become advocates for causes. However, I believe that journalists have a responsibility to investigate and report on citizens' needs as they struggle to understand and navigate the health-care system. People need help in understanding the ways in which scientists and policymakers reach conclusions. In that sense, there is an inherent educational role that journalists must assume."

This does not mean that journalists must give up their independence and aspirations towards objectivity. As prolific American science writer David Perlman (as quoted in Nelkin, 1995: 89) says:

"We are in the business to report on the activities in the house of science, not to protect it, just as political writers report on politics and politicians."



Journalists need:

- to investigate and report the possible conflicts of interest among sources of health information.
- to investigate and report the possible links between researchers and private companies and public institutions, patient advocacy groups and their sponsors, and non-profit health and professional organizations and their sponsors. "To fail to do so may mean that journalists become unwitting mouthpieces for incomplete, biased, and imbalanced news and information."
- basic science knowledge to recognize bad science. Information based on poorly designed or poorly executed studies should not be reported unless the flaws are emphasized.

- to scrutinize terminology used in health news. Vague, sensational terms (such as "cure," "miracle," and "breakthrough") may harm news consumers by misleading and misinforming (Schwitzer, 2004).

## 2.9 Opposing Camps

The second part of this literature review looks at three studies that have zoomed in on the way that journalists and scientists view each other. They have tried to gauge the attitudes that each have toward each other as a starting point to find a way forward on what can be done to heal the rift between the two professions. There are two studies that were conducted in the developed world, namely the United States and one from South Africa which is part of the developing world.



## 2.10. Worlds Apart

A total of 1432 scientists and journalists in the United States were surveyed over a year in a study called "Worlds Apart" - a title chosen to illustrate the marked differences that exist between journalists and scientists in their perceptions of each other and in the way they do their jobs (Hartz & Chappell, 1997).

The authors believe that the public support and understanding of science and technology is in a serious "state of decay" and that:

"...at the root of the problem and the heart of the solution are those who control the flow of crucial information about the value of basic

scientific and technological research: the scientists themselves and the journalists who communicate their triumphs and failures to the American public".

The Freedom Forum First Amendment Center Survey set out to investigate the attitudes scientists and journalists have toward each and their respective views on disseminating and translating new scientific information via the media to the public.

They found that "nowhere has the distrust toward journalists been so pronounced or so pervasive as in the science/technology community." The scientist sees the journalist as "imprecise, mercurial, and possibly dangerous" while the journalist sees the scientist as "narrowly focused, self-absorbed, cold-eyed and arrogant".

Hartz and Chappell (1997), the authors, warned that unless the two professions found common ground, the public would be short changed and America's future as a leader in scientific discovery and pursuit would be jeopardized.

A rather troubling result was the apparent lack of confidence the scientists have in the media. Only 11% of the scientists expressed a great deal of confidence in the press, while 22% said they had hardly any. They were more scathing of television coverage with as many as 48% of them saying they had virtually no confidence in the medium.

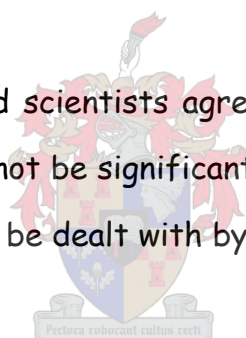
Journalists meanwhile complained that scientists' jargon and endless qualifications about their findings made it almost impossible to report for the public. Scientists (90%) however, said journalists had no basic science knowledge and could not

interpret statistics and probability. They were especially unhappy about the media regularly overstating the risks associated with various substances and activities.

Scientists said that 80% of the media's top managers were more interested in sales and profit than in telling the public what it needs to know. A majority of scientists (76%) accused the media of pursuing sensationalism rather than the truth.

Reporters felt scientists did not understand that "news" was a perishable commodity that must be relevant to readers, listeners and viewers.

The majority of journalists and scientists agreed that there was no fundamental reason why the situation could not be significantly improved. Both parties felt that the complexity of science could be dealt with by journalists.



They saw the problems in their interaction and communication with each other as technical and reparable. Journalists (74%) and scientists (60%) concurred that science and technology was important in America and that the public cared about science even if they did not always understand it. Both felt that contradictory research findings were confusing to ordinary people and that better communication and providing a context for the public was necessary.

Willing to admit some responsibility, the majority of scientists felt they were to blame for the public's lack of understanding science. They said "It's really our fault. You know, we don't do a very good job often times of communicating." However, more than 80% of them said they were willing to take time out from the lab to be trained on how to communicate better with the public. Journalists were



prepared to come to the party saying that they too needed training to better understand science.

In an effort to get accurate and informed science messages out to the public, the authors suggest that:

- Scientists and journalists should begin a dialogue to educate each other about how to meet each others needs and those of the public.
- Scientists and journalists should participate in workshops and continuing education projects to help them get a taste of the issues and problems they face in their different disciplines.
- A simple approach to media training for scientists would be to tap the skills of media training experts. Future scientists should take an undergraduate course in communication.
- Journalists could do with training in the sciences and especially the scientific method including peer review.
- The scientific community should expand its Internet resources so that journalists and the public have access. The sites should be re-modeled as easy-to-access sources of scientific findings. Papers should be available online on their publication date or beforehand with suitable understandings about embargoes. Scientific and technological websites should have simple language summaries and the most important work should be flagged.
- Both disciplines should train articulate spokespeople to comment for them.

In conclusion the authors share their belief in the importance of narrowing the gap between journalists and scientists for the greater good. They said:

"Professionals, whether they are scientists or journalists, who fail to deliver and interpret the news of their age, fail as well. And their fate is ultimately ours. "

## 2.11 Under the microscope

In their report *Under the Microscope*, authors Rubin and Rogers (1993) scrutinised the relationship between the media and physicians/doctors. They wanted to understand more about "the divisions that separate" doctors and the journalists who report on their work.

A total of 857 doctors, members of the American Medical Association and Associated Press managing editors took part in the nationwide survey reflecting their attitudes towards news coverage and the relationship between journalism and medicine. The authors found, "not surprisingly" a wide gap between how doctors perceive the media and their relationship to it and how journalists see the same issues.

Over the past few years public opinion polls have shown that ordinary people are becoming more interested and aware of the impact of medical developments on their lives. This, Rubin and Rogers say, is inevitable with the accelerating cost of health care.

They argue that media and medical professionals could play a mutually meaningful role by giving in-depth answers to the complex, controversial questions that threaten to confuse public understanding of health matters.

They regard the ability to communicate with patients and reporters as valuable and vital a tool as a stethoscope. Dr David Satcher, the Director of the US Centers for Disease Control and Prevention, is quoted in the study as saying:

"We've come to a point where, unless we can communicate to people outside of medicine, we can't achieve a lot of our goals - certainly those related to health promotion and disease prevention, or even getting people to understand the elements of health reform."

He adds that there are physicians who are more articulate than others in communicating with people in general. "We need more of those physicians".




In the survey, journalists and doctors agreed that they share the responsibility for ensuring that only accurate health care information reaches the public but that this depended on better communication between them. They were, however, quick to acknowledge that it was "probably likely" that there would always be some wariness from both sides.

The doctors believe that the media has worsened already poor relations with journalists. Doctors don't trust the news media and the news media don't trust doctors.

"Our research suggests that on no other newsroom beat - including business, where the disenchantment is palpable - there is such an atmosphere of mutual mistrust."

In the report John Seigenthaler, chairman of the Freedom Forum First Amendment Center, argued that the barriers of hostility had to be breached, in the interest of a public that needed access to affordable, quality health care and understandable quality information. Both reporters and doctors would benefit from a healing of their relationship.

The survey found that:

- 
- Most doctors felt that news coverage was biased against the medical profession with the majority of reporters and editors emphatically disagreeing.
  - Journalists felt that reporting enhances the status of medicine. Doctors disagreed.
  - Journalists believed that they portray a positive view of doctors but the doctors felt differently.
  - Reporters were adamant that they get the technical details of medical reporting correct. But, editors were less sure and doctors were sure that they do not.
  - Doctors felt that coverage is too sensational. Journalists disagreed.
  - Journalists said that their education is sufficient while doctors remained unconvinced. Journalists felt that they can be objective. Doctors disagreed.
  - The parties agreed reporting tends to concentrate too much on physicians.

- They both felt that there is not excessive emphasis on research in medical reporting.
- All agreed that low wages offered to medical writers cause problems in attracting the best journalists.
- Neither the journalists nor the doctors blamed the mistakes in the medical stories on the poor communication skills of doctors.

There were significant differences in how doctors and reporters assessed the performance of the news media: Doctors believed that journalists did a "good" job in covering general news but they were not that impressed with coverage of medical issues. They said local TV coverage of health was better than in the local newspapers.



While many doctors felt that their relationship with the media had deteriorated they said the quality of medical coverage had improved "greatly" over the previous five years.

But the authors warned that improved coverage "should not go hand in surgical glove with a cozier relationship between doctors and the press". In fact they said that journalists are not critical enough, especially when it comes to examining doctors' financial interest in a particular story topic.

Bill Snyder, a medical writer with the *Nashville Banner*, is quoted in the report as saying "coverage of health care will improve as reporters become more

sophisticated critics of medicine and medicine becomes more willing to put itself under the microscope."

Recommendations included that:

- Doctors who deal with reporters should make sure they get training to better understand the media's needs and constraints. Journalists should further their education by attending seminars, medical meetings and applying for fellowships.
- Doctors and researchers should try to make themselves accessible to the media as far as possible and be aware of reporters' deadlines.
- Doctors should follow up reports especially when reporters make mistakes. If corrections are not forthcoming then the doctors should set the record straight for the benefit of the public. To avoid errors journalists should review direct quotes and technical information with their source, if requested.
- Reporters should rely on good reporting and not just on press kits and public relations firms for their information. News organisations should set up medical advisory committees or informal networks to consult when necessary.

The authors felt that medical and journalism schools have a valuable part to play. Medical schools should encourage faculty to agree to press interviews and public affairs officers should offer training to key faculty to improve their understanding of reporters' needs. Journalism schools should consider adding elective courses in science or medical writing to their curricula.

## 2.12 MRC scientists and the media

In the study *MRC Scientists and the Media*, the experiences and attitudes of South African medical scientists to the media and to reporting their findings to the public were assessed.

Gething (2001) did a survey of 100 scientists employed at the Medical Research Council, a statutory research body that gets about 60% of its funding from the taxpayer. As a publicly funded institution the MRC must be able to justify the money and also explain what it does with it in terms of its mandate to improve the health status of the country.

It is crucial that the council's research findings be communicated to the public. However, the communication channels between the scientists and the public were very limited. Although 48.9% of the scientists had each published over 30 articles in peer reviewed journals, 38.9% had never had anything published in the mass media.

As many as 86% of the scientists thought the public got their information about scientific research from local newspapers, while only 10% thought they got it from material published by bodies such as the MRC.

As with the scientists in the *Worlds Apart* study and the doctors in the *Under the Microscope* study, the MRC scientists (92.8%) strongly agreed or tended to agree that they should communicate their research to the public who they saw as equally

important as the country's policy makers. The author says it is interesting that the public is jointly first selection as most important to communicate with, as most of the respondents' peer-reviewed journal articles had never been mentioned in the mass media. It is thus unlikely that much if any information about their research has ever actually reached the general public.

#### Other findings:

- Most (70.8%) felt that they would like to devote more time to getting their research findings and the implications of their work across to the public.
- But, an overwhelming majority (86.9%) of the scientists had never had any training in how to deal with the media. Many of their comments reflected "unrealistic expectations" of the media. This suggested a need for training scientists in who the media are, what their job entails and what scientists can expect in interview situations. Encouragingly, 80.8% of the scientists said they would be keen to have media training if the MRC provided it.
- They complained that even if they wanted to communicate their research, the daily requirements of their jobs left them with too little time to explain their work and its implications to others (47.5%) or even to do their own research (36.4%).
- When the scientists themselves or their work were the subject of a news story, most of them (65.4%) said they had been either 'very satisfied' or somewhat satisfied with the coverage.
- The scientists recognised that the public were likely to get most of their knowledge of scientific research and its implications from the lay media. However, although they felt that the media was an effective conduit for



getting information to the public a meager 5% of them trusted national newspapers to do so.

- They did not rate general coverage of science and technology in the media very highly and most also rated the journalist that reported on their work as 'not very knowledgeable' in terms of general knowledge.
- Not surprisingly then that the scientists were concerned that if they reported their findings to the media the research would be reported inaccurately.

To improve communications between them and the public;

- 50% of the scientists felt that a specialist communicator should be appointed to talk to journalists;
- 48% said the MRC should encourage scientists to spend time on science communication, and
- 36% said that specialist communicators needed to be appointed to talk to the public.

The scientists' desire to have communicators taking over what they agree is their duty and responsibility to the public, is a symptom of the MRC scientists' lack of experience and confidence in dealing with the media and public, according to the author.

Concerns that research data will be misrepresented by the media are best addressed by giving journalists easily understood explanations; holding back the information could promote even greater misunderstanding.

The author concludes that the MRC has to make sure that the great divide is crossed, and motivate scientists to get their news out there to the journalists.

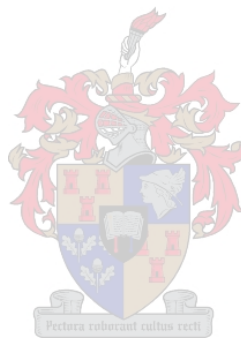
Recommendations to help the cause included that:

- Time be devoted to communication, training be provided and incentives outlined.
- Science communication and the development of links with the community and the media, should be seen as "part and parcel" of scientific research, and given due recognition.
- The MRC needed to develop a clearly spelt out media strategy that gives guideline on specific situations. These included: rules on who can speak to the media, whether employees can comment on political issues affecting health policy, whether employees can be critical of government policies and whether they are allowed to talk about MRC projects.
- Training that could potentially change the negative attitudes journalists and scientists have toward each other was needed.

## **2.13 Conclusion**

These studies have found a lot in common between the way scientists and the media view each other. According to the studies, the relationship between the two professions is not as healthy as it should be. A vital common thread that runs through the research is the need for the two parties to come to the table and

learn more about each other. In so doing, a greater awareness and mutual understanding about the culture of science and the culture of journalism may help to heal the rift. Training for both on how to deal with each other is a primary recommendation and is the basis for this thesis. This work takes these three important studies further with describing a WHO science communication training programme and for the first time, assessing its impact.

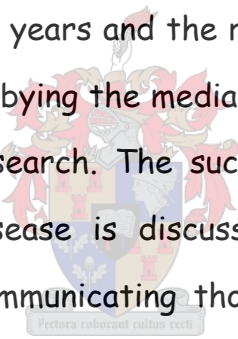


# Chapter 3

## The Pen and the Jab

### 3.1 Introduction

This chapter gives a short background to the history of the relationship between medical science and the media in terms of the inherently controversial issue of vaccination, which is an essential part of public health programmes. Clashes between doctors and the media over the management of infectious diseases have been happening for hundreds of years and the rise of anti-vaccination groups that have been very successful in lobbying the media, have bedeviled the work of public health doctors and vaccine research. The success of vaccination in controlling, eliminating and eradicating disease is discussed and the challenges for both scientists and the media in communicating thorny issues around vaccination are examined.



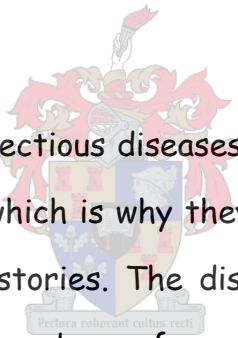
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*"Epidemical Fevers and Augues grow very common, in some parts of the Country, whereof, tho' many dye not, yet they are sorely unfitted for their employments: but in some parts a more malignant fever seems to prevail in such sort that it usually grows thro' a Family where it comes, and proves mortal unto many."- Publick Occurrences as quoted in Rubin and Rogers (1993) and Krieghbaum (1967).*

### 3.2 Long history of coverage and conflict

Media interest in science, health and medicine is literally as old as the American newspaper (Rubin & Rogers 1997, Krieghbaum 1967). The paragraph quoted above is from the front page of the only issue of the *Publick Occurrences*, America's first newspaper, published on 25 September 1690.

The article is about public health and it continues in the next paragraph to elaborate on the "malignant fever", namely smallpox that "is raging" in Boston and which has claimed 320 lives. Mention is made of an outbreak 12 years before of the highly infectious disease, this time referred to as the "Epidemical Contagion". The author talks about the disease "unhappily spreading".



In many ways, the nature of infectious diseases has the hallmark of a good human interest story for journalists, which is why they (journalists) are more than likely to be drawn to covering such stories. The diseases are infectious, so they can spread quickly and affect large numbers of people, especially children. Diseases do not discriminate between the rich and the poor, and they cause pain, discomfort and uncertainty. If infected people are severely compromised, they die.

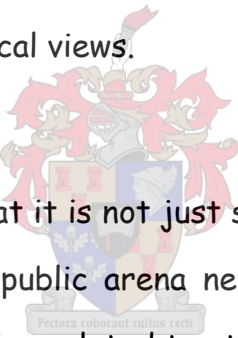
There are many dissenting points of view on how to treat and prevent disease as we have seen in the case of HIV/AIDS and other diseases. Groups of people like anti-vaccination lobbyists actively seek to have their point of view in the media.

The highly contagious disease, smallpox, has the dubious honour of being behind the first American conflict between doctors and the press. The clash occurred in Boston in 1721. The American city was ravaged that year by a smallpox epidemic

that infected half the 10,500 citizens and within a few months killed 900 of them (Rubin & Rogers, 1993: 8).

"Many Bostonians were horrified by the idea that their children should be unnaturally given, through immunisation, a small dose of smallpox to protect them against a natural possibly fatal infection. They feared inoculation would spread the disease, not control it" (Rubin & Rogers, 1993: 8).

What transpired was a vigorous and heated debate in *The Courant* newspaper, essentially between two doctors and their supporters, one in favour of inoculation and the other opposed to it. Both found an avenue - the media - through which to present to the public their medical views.



Bucchi (1998: 110) points out that it is not just science that frames messages. "An issue that is discussed in the public arena never exists in a vacuum. It is also framed and given meaning by being related to other issues."

So when in 1881 Louis Pasteur, a French chemist, vaccinated sheep against anthrax, the event attracted the attention of anti-vaccination, anti-vivisection and homeopathic movements. The press had a field day covering the debate and fuelling it at the same time.

Pasteur developed chemical techniques to isolate viruses and weaken their effects so they could be used as vaccines. His first administration in 1885 of rabies vaccines to humans was strongly protested by physicians and the public but his vaccine has managed to save thousand of lives.

### 3.3 Anti-vaccine lobby

Anti-vaccination lobby groups are not a new phenomenon. The society of anti-vaccinationists was set up in 1798, just two years after Edward Jenner, an English country doctor, showed (in 1796) that cowpox material was effective in preventing smallpox. Forty five years later (in 1853), the Anti-Vaccination League was founded in London to oppose the compulsory vaccination acts of Great Britain enforced between 1840 and 1853.

"While the way information is spread may have changed dramatically since the 19<sup>th</sup> century, the basic concerns and the activities of these groups have changed little since then" (Schoub, 2003: June).

Currently Schoub (2003: June) says there are more than 30 dedicated anti-vaccination sites on the Web and an additional 300 sites who also lobby against vaccination.

"Most of these sites depict moving personal accounts of parents often with vivid visual images of children reported to have been damaged or killed by vaccines."

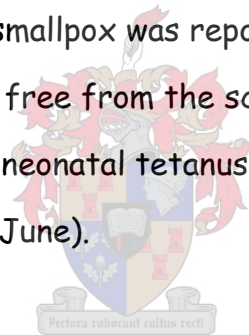
Packaged news is often just what an inexperienced journalist, who does not know how to question sources, may be looking for.

### 3.4 Pro-vaccine lobby

Vaccines are arguably the most successful medical intervention to date. The South African National Institute for Communicable Diseases says so and adds that

immunisation is an essential component of modern public health programmes. Similarly, the US Centers for Disease Control and Prevention has identified immunisation as the most important public health advance of the 20th century (Dennehy: 2001). The WHO ranks clean water and vaccines as the two public health interventions that have had the greatest impact on the world's health, preventing disability and more than two million deaths per year.

A dramatic example of vaccine success is smallpox which was once responsible for formidable human epidemics as noted above. In 1967, it was the cause of two million deaths. In that year the WHO launched a global smallpox eradication campaign, systematically vaccinating entire populations in endemic countries. The last case of naturally acquired smallpox was reported from Somalia in 1977, and in 1980, WHO declared the world free from the scourge. Vaccines have taken a major toll on diseases including neonatal tetanus, polio, pertussis and diphtheria. (WHO (C) 2006, Schoub 2003, June).



Despite their proven effectiveness in reducing the risk of diseases that cause deaths and disability, the notion of vaccination continues to court controversy. One might ask why.

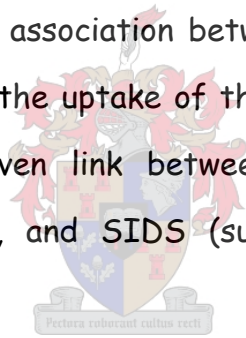
### 3.5 Vaccine refusal

Schoub (2003: June) lists three main reasons for refusal of vaccines, namely: fears about vaccine safety, secondly misconceptions and myths about vaccines, and, thirdly philosophical and religious objections.



Safety is an important issue for parents because in the first place vaccines are administered to healthy people, mainly children, unlike other pharmaceutical products. As Dennehy (2001) notes, "vaccines like other pharmaceutical products are not entirely risk-free; while most known side effects are minor and self-limited, some vaccines have been associated with very rare but serious adverse effects. Because such rare effects are often not evident until vaccines come into widespread use (e.g. during mass immunisation campaigns), governments maintain ongoing surveillance programmes to monitor vaccine safety".

Myths and misconceptions occur from time to time and are used by anti-vaccination groups to substantiate their claims that vaccines are dangerous. It has been stated how the supposed association between MMR vaccine and autism and chronic bowel disease affected the uptake of the vaccine in the UK, resulting in a measles outbreak. The unproven link between DTP (diphtheria, tetanus and pertussis or whooping cough), and SIDS (sudden infant death syndrome) is another.



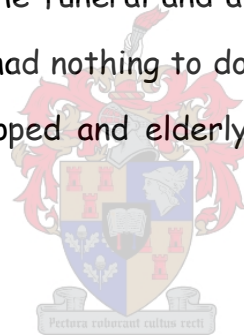
Schoub (2003: June) says that in many cases these links have been based on limited unscientific "studies". Most often though, the claims are made without any investigation and are "usually as a result of the logical fallacy of *post-ergo propter hoc* (after this, therefore because of this)".

The media have at times fallen into the trap of repeating unproven associations which have resulted in mass immunisation programmes being thrown into crises and parents refusing to have their children vaccinated. An example of this was related

at a workshop in Cape Town by Rose Soares, the technical co-ordinator of Brazil's Vaccine Programme.

Soares (2002) said a newspaper in Brazil wrote a story about the death of a 70-year old woman who received a flu vaccine during a campaign.

The headline trumpeted "Woman dies after flu vaccine" and the story gave the impression that the vaccine had caused her death. Although the link was made before a medical investigation and an autopsy had been conducted the campaign was plunged into crisis with people rejecting the vaccine for fear of dying. Following the interruption of the funeral and a subsequent second autopsy, it was found that the woman's death had nothing to do with the vaccine. Meanwhile public confidence in the vaccine dropped and elderly people were at risk of getting a deadly form of influenza.



It was only after a major effort by the health department that the media retracted its story. But, the damage had already been done.

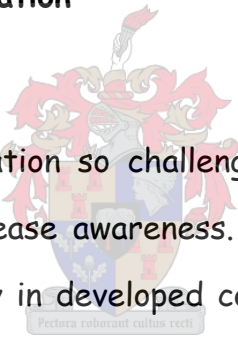
The refusal of vaccination, on religious grounds, by members of the Dutch Orthodox Reformed Church of the Netherlands resulted in two outbreaks of paralytic poliomyelitis in 1978.(Schoub, 2003: June)

In Zimbabwe, health workers in Mutare District, Manicaland Province in Zimbabwe, which borders Mozambique, became aware of measles outbreak in August 2003 resulting in 80 cases and 20 deaths. The outbreak occurred primarily in Apostolic Faith communities of the Johann Marange sect who refuse modern medicine

including vaccination. Although other reasons were given for the low uptake of the measles vaccine, "religious refusers" had a significant impact on vaccine coverage. (UNICEF, 2003 - Annex V).

The global WHO programme to eradicate polio from the world by the year 2005 is presently being threatened by ongoing vaccination refusal by Muslim communities in Northern Nigeria, who have been influenced to believe that polio vaccine is "doctored" with contraceptive material. (Schoub, 2003: December). The Nigerian case issues will be dealt with further in the next chapter.

### 3.6 Challenges of vaccine communication

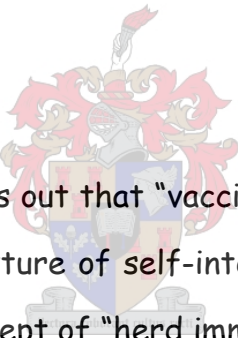


Why is vaccine risk communication so challenging? Perhaps the most important factor may be the lack of disease awareness. The dramatic decline of vaccine-preventable diseases (especially in developed countries which are well resourced) has inevitably decreased public awareness of these illnesses. People in the West, for example, are unlikely to see people stricken with polio because the disease has been eradicated in developed countries due to vaccines. This is likely to prompt greater reluctance for parents to accept adverse reactions after vaccination. Another factor (noted above) is the power of temporal association, *post hoc, ergo propter hoc* or what follows immunisation must be caused by it (Ball, Evans & Bostrom, 1998).

There is a wealth of literature on the importance and difficulty of communicating the risk and benefits of vaccination to parents. Part of the problem is that individuals perceive risk differently. Also although doctors may concentrate on the statistics regarding general vaccine effectiveness and known risks of vaccine

preventable disease, parents making vaccination decisions may perceive risks in a broader religious, cultural and personal context.

In the Hartz & Chappell study (1997) scientists complained that journalists could not interpret statistics, or make sense of them for ordinary people. The HRT controversy referred to in the previous chapter was a classic situation of journalists confusing relative and absolute risk. The ultimate goal in risk communication is to improve public understanding and decision-making with regard to vaccines. Doctors have to learn to communicate risk effectively with their patients. They also need to perhaps go the extra mile to make sure journalists understand the issues. The media are the vital link between health practitioners and the broader society.



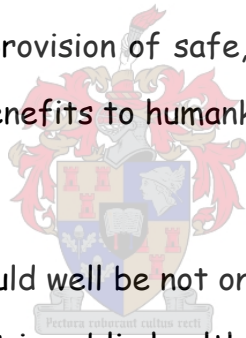
Schoub (2003: December) points out that "vaccines are almost unique in demanding from a healthy population a mixture of self-interest together with some measure of altruism." Explaining the concept of "herd immunity", he says that:

"For vaccination programmes to be effective they require that the great majority of the population is successfully vaccinated, thereby breaking the chains of transmission which maintain the infection in the population. It is clear that those who refuse or neglect to be vaccinated not only render themselves unprotected against infection but they also have a significant effect on society in contributing to its vulnerability to infections by progressively increasing the pool of susceptibles which the infectious agent needs to maintain its continuing existence in a population."

The importance of the media in explaining this to a broader audience cannot be underestimated. The power of the media to derail immunisation programmes have already been described above.

Most would agree that the media in a democratic society aims to be a champion of the underdog, a voice for the voiceless. As stated by Schoub (2003: December) what is meant by the public good may mean different things to different people or professions but he says:

"what should be incontrovertible is the one human activity which depends so critically on social responsibility to achieve its goals, public health, and, in particular, childhood vaccination programmes. Vaccines, together with with the provision of safe, clean water are responsible for the most profound benefits to humankind."



A definition of public health could well be not only what health practitioners aspire to but journalists as well. What is public health then? According to a dictionary of epidemiology:

"Public health is one of the efforts organized by society to protect, promote, and restore the people's health. It is the combination of sciences, skills, and beliefs that is directed to the maintenance and improvement of the health of all the people through the prevention of disease and the health needs of the population as a whole. Public health activities change with changing technology and social values, but the goals remain the same: to reduce the amount of disease, premature death, and disease-produced discomfort and disability in

the population. Public health is thus a social institution, a discipline, and practice."<sup>1</sup>

The Acheson Report<sup>2</sup> offers a more succinct definition: The science and art of preventing disease, prolonging life, and promoting health through the organised efforts of society.

<sup>1</sup>*Higher Education for Public Health: A Report of the Milbank Memorial Fund Commission. New York: 1976*

<sup>2</sup>*Public Health in England: The Report of the Committee of Inquiry into the Future Development of the Public Health Function. Cmnd 289. London: HMSO, 1988*

(From *A Dictionary of Epidemiology*. 4<sup>th</sup> Edition edited by John Last 2001).

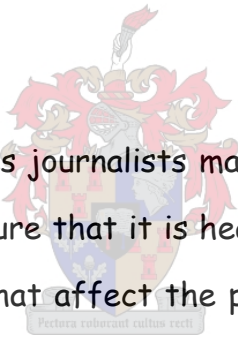
Vaccination programmes are an important example of how the media can be a positive or negative force. They have shown themselves to be a force for both. On the one side are the "community (radio) spots" which appeal for blood donors, while on the other there have been stories with poor judgement not infrequently shown under the guise of so-called "investigative journalism". These programmes will depict heartrending scenes of severely affected children purportedly damaged by vaccines together with their traumatized parents but seldom balance this with equally distressing images of children damaged by diseases which could so effectively have been prevented by the simple administration of a vaccine (Schoub, 2003).

Schoub (2003) goes further to say "Freedom of speech and freedom of the press are unassailable components of a democratic state which very few would like to see interfered with. However, should the media with its immense social power choose

to publish on health related matters, they need to be answerable to the same kind of empowered and informed professional watchdog that the medical profession is responsible to for its ethical conduct. Protection of public health should be no less a social responsibility than the protection of individual patients."

### 3.7 Conclusion

The relationship between the media and medical science in particular around the important issue of vaccination has an historical context. Vaccination is inherently controversial and controversy is often the scent that journalists are instructed to follow.



Science is only one of the voices journalists may cover in getting the issues. It is incumbent on science to make sure that it is heard loud and clearly especially with regard to health programmes that affect the public at large. It is also true that not all vaccines are 100% safe and it is the responsibility of health scientists/professionals to explain to the public via the media what the risks and benefits of this intervention are.

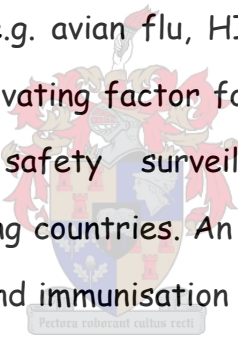
Vaccine safety, a WHO priority, is elaborated on in the next chapter. In addition the WHO training programme on vaccine safety and its very important component on dealing with the media in a crisis and at other times is described. The methodology for assessing the impact of the training which is at the heart of this thesis is explained.

# Chapter 4

## Science Communication Training

### 4.1 Introduction

This chapter takes a closer look at vaccine safety. Many poor countries do not have even have vaccines and vaccine safety issues are different from those in richer countries. Developing countries are faced with infectious diseases such as polio that are already eradicated in Western countries and they are also facing emerging infectious diseases (e.g. avian flu, HIV/AIDS). Vaccination safety is a WHO priority and was the motivating factor for worldwide training on setting up or bolstering immunisation safety surveillance programmes, for health professionals mainly in developing countries. An essential component of the course for drug regulatory personnel and immunisation programme managers is training on how to deal with the media during a crisis and how to build partnerships with journalists in the interests of public health.



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*"Although the 20th century saw a major expansion of the world economy, impressive military/security advances, and spectacular progress in science and technology, the grim reality in the first decade of the new millennium is that human life, health, and security remain under severe threat—but now from the adverse effects of inexorably widening disparities in wealth, health, and knowledge within and between nations. The gap between the*



*income of the richest and poorest 20% of people in the world increased from a 9-fold difference at the beginning of the 20th century to 30-fold by 1960 - and since then to over 80-fold by 2000. Although life expectancy has improved dramatically worldwide during this century, this trend has been reversed in the poorest countries in recent years. The challenge of achieving improved health for a greater proportion of the world's population is one of the most pressing problems of our time and is starkly illustrated by the threat of infectious diseases" (Benatar, Daar & Singer, 2005).*

#### 4.2 Immunisation in developing countries

While vaccine success has seen a marked reduction in diseases in developed countries, developing countries are way behind in vaccine coverage rates.



In Africa alone, 10 million children have never been immunised against preventable infectious diseases although the vaccines are available. About 10 million children under the age of 5 years die annually worldwide, with 80% of these deaths occurring in Africa. Approximately a third of them can be prevented by vaccines against measles, pertussis, diphtheria, tetanus, hepatitis B, *Haemophilus influenzae*, and rotavirus. These vaccines are licensed in all African countries but because of operational problems, they are not getting to the children. With bad press about vaccines in the West drug manufacturers are less inclined to develop and produce vaccines which also do not garner as much profit as other pharmaceutical products such as drugs (Baleta, 2005: 472).

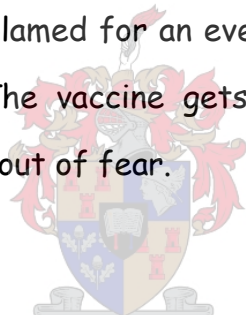
In developing countries immunisation programmes are also hampered by lack of infrastructure and transport. The lack of political will, inadequate health budgets which are bearing the brunt of costs associated with HIV/AIDS and inadequate training for health personnel are all real obstacles. Unlike in most of the developed world, surveillance and monitoring systems to ensure vaccine safety are not always up and running efficiently.

In public health immunisation campaigns, vaccines are given as a preventive measure to large numbers of healthy people, especially children. As large vaccine coverage rates increase, and the burden of vaccine preventable diseases (such as polio, measles and pertussis) falls the benefits of vaccines become less of a concern, and the public become less tolerant of adverse reactions or what is referred to as adverse events following immunization (AEFIs).

Although the vast majority of adverse events reported after vaccinations are mild, some have been more serious. Sometimes, these events are due to the vaccine itself and are vaccine reactions such as those at the site of injection (e.g. swelling), but many other events are coincidental medical conditions (such as the erroneous link made between MMR and autism). The large number of doses administered and the fear of injections lead to the reporting of coincidental events following immunisation, causing undue fears and allegations. Therefore, after the reporting of an adverse event, the attention usually focuses on the quality of the vaccine and potential production problems or mishaps (Duclos, Delo, Aguado, Bilous, Birmingham, Kieny, Milstein, Wood & Tarantola, 2004).

To this end, the WHO and national drug regulatory authorities worldwide have devoted energy and resources to making sure that vaccines of assured quality are produced. But, this is not enough.

In developing countries, where there is a lack of infrastructure, education, literacy and sanitation etc, adverse reactions which may result in death have found to be mostly due to programmatic error or human error. These include unsafe injection practices such as using unsterile needles or using less than optimal conditions for vaccine storage. The media, the purported watchdog of the public, will always be drawn to stories where negligence has a part to play in people becoming sick. Lack of insight by the media or a lack of credible information given to the media could end up with the vaccine being blamed for an event or series of event when in fact it was due to human error. The vaccine gets a bad name and parents refuse immunisation for their children out of fear.

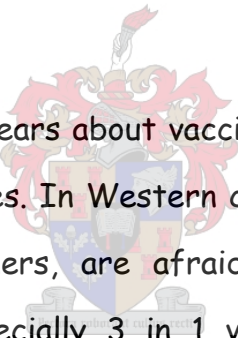


Duclos *et al*/(2004) points out that any adverse event or vaccine safety issue, be it real or perceived, may lead to rumours in the community and more widespread reports in the media. Rumours regarding AEFIs, can undermine confidence in vaccines and, ultimately, have dramatic consequences for immunisation coverage and the incidence of disease.

In the main, vaccines have come to represent a lot more than just a needle and an antigen (any substance, usually a protein that is capable of producing an adaptive immune response).

As Corfield (2003) says, science is neither good nor evil, it is neutral. However, vaccines which can be described, in this context, as evidence-based scientific applications, can take on negative or positive attributes depending on who is driving an agenda. If the public are to make the best decisions possible about their health and welfare, it's imperative that they be given credible information, preferably from the horse's mouth - the scientist/health professionals/officials. But, if scientists/health care professionals are not doing the job of communicating what they do and why they do it to the public and the media, ordinary people are likely to fall prey to rumours that unfairly put the vaccine in a negative light.

#### 4.3 Vaccine fears

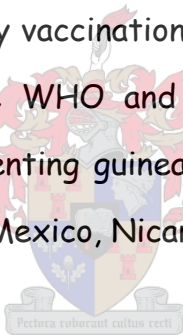


According to UNICEF (2003), fears about vaccines in the developing world centre on medical or philosophical issues. In Western countries parents, often backed by alternative medicine practitioners, are afraid of the vaccine damaging their children's immune system (especially 3 in 1 vaccines) or causing allergies, for example. In the United Kingdom in 2000, a nationwide epidemic of measles took place in children of anthroposophic communities (followers of the philosophy of Rudolph Steiner who maintained that illnesses such as measles positively affect the child's spiritual development) (Schoub, 2003: June).

In the developing world vaccines are most likely to be rejected on religious (Philippines, Tanzania), political (Kenya) grounds. The mass media have helped wittingly or unwittingly to spread unfounded rumours (Uganda) resulting in decreased coverage rates (UNICEF, 2003).

In the Philippines in 1995, an international “pro-life” organisation spread rumours that the Tetanus toxoid vaccine (TT) was being given to women of childbearing age by immunisation programmes in developing countries and that a contraceptive hormone was included in the vaccine. In a press release circulated via the Internet to its partners in more than 60 countries, the organisation said tests of TT carried out in Mexico had shown it contained the pregnancy hormone human chorion gonadotrophin (hCG) (UNICEF, 2003: 45).

Tests in the Philippines performed by local hospital laboratories using pregnancy tests kits also reportedly showed the presence of the hormone. The organisation alluded to reports that “millions of women in Mexico and the Philippines have unknowingly received anti-fertility vaccinations under the guise of being inoculated against tetanus. It accused the WHO and UNICEF of using these women as “uninformed, unwitting, non-consenting guinea pigs” in several countries with high population growth rates, notably Mexico, Nicaragua, Philippines and Tanzania.



With support from the WHO, six independent laboratories in five countries ran tests on TT from seven different manufacturers, including those supplying the four countries affected directly by the campaign. The WHO issued a statement in 1995 to the effect that the rumours “are completely false and are totally without any scientific basis” (UNICEF, 2003: 45).

In 2002 rumours that the polio vaccine causes impotence in male children or infects them with HIV/AIDS, were a major factor hampering vaccine acceptance in the populous north Indian state of Uttar Pradesh. At that stage, India had the

worst polio caseload in the world with 407 cases being reported countrywide, 347 (85%) of which were in Uttar Pradesh (Kumar, 2002).

This changed in 2003 when, amid rising Muslim-Western tensions worldwide, Nigeria's Muslims began heeding allegations that the polio vaccine is an American-inspired plot to spread HIV/AIDS or to cause infertility in order to depopulate the world of Muslims. (Dyer, 2005).

The Muslim clerics told millions of faithful in Kano, the Muslim political centre in northern Nigeria, that the American government, which had funded the vaccine, had laced the vaccine with either infertility drugs or HIV. These allegations were later proved false by independent laboratory tests. Some leaders admitted in interviews late last year that they never believed such a thing. But they remained silent, they said, in order to stop anything associated with the United States. The US-led wars in Iraq and Afghanistan, several said, had led them to believe that America wants to control the Islamic world, and the polio vaccination effort gave them an opportunity to resist a US-funded initiative. (Dyer: 2005).

The WHO has confirmed that the polio originating from Northern Nigeria has spread to Mali and Guinea (which were polio free) causing a delay in the polio eradication deadline which the WHO set for end 2005.

The polio battle, down to its last 667 cases worldwide, now faces its most difficult task since the campaign to eradicate it started in 1988 -- when the virus was transmitted in 125 countries and infected 370,000 children. Nearly half of the remaining cases are now in Nigeria and neighbouring Niger.

In 1996, in Kenya rumours also flared about the risk of the polio vaccine causing infertility as well HIV/AIDS. Anti-vaccine messages were in that case preached from pulpits in the Catholic Church. In 1997, an election was to take place in the central province and infertility rumours about the polio vaccine were spread, during a health department immunisation campaign, by opposition parties in an effort to fuel anti-government sentiment (UNICEF, 2003: 32).

An anti-vaccination campaign in Uganda began in the 1997 rainy season coinciding with a national polio immunisation day, when mothers noticed high mortality, probably from malaria, in their vaccinated children in the south-western districts. Parents then went to a popular private FM radio station for explanations of the deaths. A radio reporter made the link between the vaccine and infertility and HIV infection. Immunisation coverage subsequently dropped in a particular area which received the broadcast. Failure of the authorities to respond early to public anxieties about the excess mortality perceived during the vaccination campaign, and the sometimes inconsistent responses of officialdom to media questions about vaccination caused problems for the health programme (UNICEF, 2003: 13).

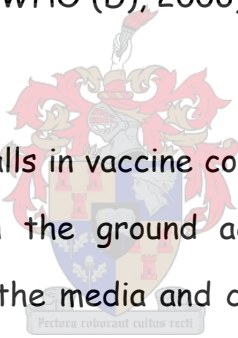
UNICEF (2003) says the internet has become an important tool in the hands of anti-vaccination groups or those opposed to governments. The internet can provide support for their allegations against vaccination. The large and growing scientific literature on vaccine side effects has also unwittingly become a blunt instrument for attacking all vaccines, without due attention to the question which all parents need to answer: do the benefits of this vaccination for my child exceed the risks? The author suggests that health officials have a duty to explain risks and benefits



to the media so that they can in turn inform the public who have to make the ultimate choice about medical interventions they may seek.

#### **4.4 The WHO and Vaccine safety**

The WHO is committed to peoples' health and regards immunisation as an important part of this objective. For example, the progress on immunisation coverage for measles-containing vaccines in infants is an indicator that is key to the achievement of the fourth United Nation's Millennium Development Goal (there are five goals), which aims to reduce the global under-five mortality rate by two-thirds between 1990 and 2015. (WHO (D), 2006).



The WHO has taken to heart falls in vaccine coverage rates due to vaccine safety concerns. Rumours, started on the ground according to various agendas, are amplified or spread further in the media and can cause a crisis for immunisation campaigns. They can derail attempts at protecting and improving the lives of people, especially in developing countries.

#### **4.5 Background to the WHO training**

In order to address these concerns the WHO's Department of Vaccines and Biologicals (V&B) launched, in 1999, the Immunization Safety Priority Project (ISPP) tasked with setting up a comprehensive system to ensure the safety of all vaccinations given in national immunisation programmes worldwide. It's vital that

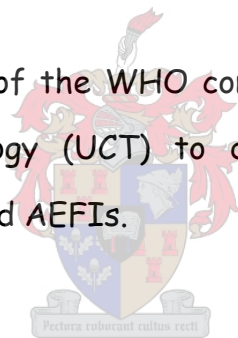


national monitoring and reporting systems for vaccine safety are efficient and well co-ordinated to deal with adverse events and public concerns. (WHO (A), 2005).

"The WHO has a role to play, not only because of its technical and normative role, but also because of its privileged relationship with country authorities and other partners and its global vision and mandate" (Duclos *et al*, 2003).

Immunisation safety includes ensuring and monitoring the safety of all aspects of immunisation, including vaccine quality, storage and handling, vaccine administration (the way the vaccine is given) and the disposal of sharps (needles).

In 1989, the V&B department of the WHO commissioned the University of Cape Town's Division of Pharmacology (UCT) to develop a 5.5-day global training programme on vaccine safety and AEFIs.

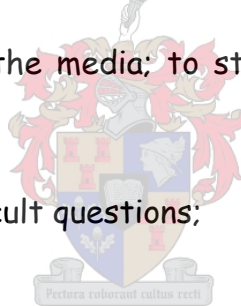


The WHO acknowledges the importance of the media as a major partner in the promotion and maintenance of public health programmes. Therefore, training on how to deal with the media in general and especially during a crisis was regarded as an important component to the course on vaccine safety.

The author, at the time a health writer on a Cape Town-based newspaper, the *Weekend Argus*, was invited to attend a think-tank session in Cape Town aimed at devising a training programme. There was a discussion around the issue of training on how to deal with the media.

During the discussion, points raised included the need for health professionals to:

- build relationships with the media (to health journalist if there is one);
- use simple language when explaining complicated concepts;
- answer basic questions and not speculate;
- have an available, accessible spokesperson;
- to learn to speak with one voice and steer clear of divided messages;
- to give statistics and explain them as well as provide a context;
- to be able to write a press release;
- to inform journalists with accurate and timely information;
- to change attitudes to the media; to stop being arrogant and patronising, and
- to learn to answer difficult questions;



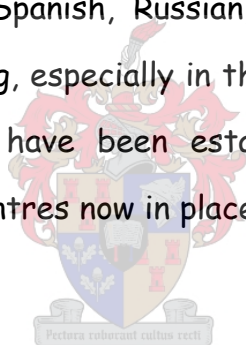
Philippe Duclos (2005), WHO medical officer in vaccine assessment and monitoring from the department of V&B says:

"Over the last few years, the media have given increasing attention to safety issues. Immunisation staff often perceive the media attention as hostile and are ill-equipped to cope with it. Although this is not the bread and butter job of Extended Programme on Immunisation (EPI) managers they felt uncomfortable in dealing with the media and we wanted to change this. This is linked to the need for and management of vaccine acceptance in the broader community.

A component on how to develop partnerships with the media was thus built into the AEFI training module."

In November 1999, the first training course on AEFI's was launched at UCT in Cape Town with 12 participants from five different countries. There were three each from Lithuania and Estonia and two each from Latvia, Jordan and Syria. Since then, over 160 participants from over 70 countries have received the training at one of four training centres including Cape Town. (Lei, 2005).

The training materials, standardised and developed by UCT, have been adapted and translated from English into Spanish, Russian, French and Chinese due to the increasing need for this training, especially in these other languages. An additional three AEFI training centres have been established, making a total of four immunisation safety training centres now in place.



They are in:

South Africa: Division of Pharmacology, University of Cape Town,

Tunisia: Tunisian National Pharmacovigilance Centre in Tunis,

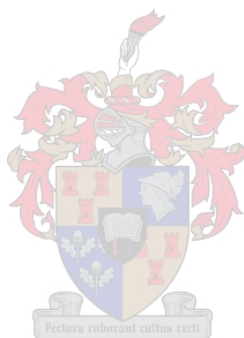
Sri Lanka: Sri Lankan Epidemiology Unit in Colombo, and

Russia: The Tarasevich Institute in Moscow.

The author was the media facilitator at the launch of the training sites in South Africa, Russia and Sri Lanka. The training sites are all in developing countries - regarded as high priority for the training.

Observers from USAID, Roll Back Malaria, and UNICEF have also been present at the AEFI training courses. They wanted to find out how the training can be adapted to their particular public health programmes (Mehta, 2004).

The training is co-ordinated by the V&B's Global Training Network (GTN) (a network established in 1996 which now comprises 16 training centres that offer instruction in various areas of vaccine regulation using approved syllabi and standardised documentation materials).



# Chapter 5

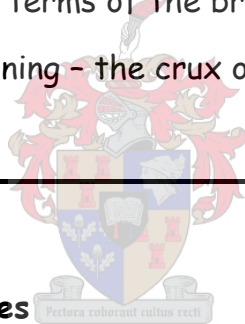
## Methodology

### 5.1 Introduction

The previous chapter attempted to give a context and a background for the WHO Global Training Network media science communication programme. This chapter focuses on the nuts and bolts of the training, what it aims to achieve and what the content of the training is. The training materials and the training methodology are described and contextualized in terms of the broader training. The methodology on assessing the impact of the training - the crux of the thesis - is also described and discussed.

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### 5.2 AEFI training course objectives

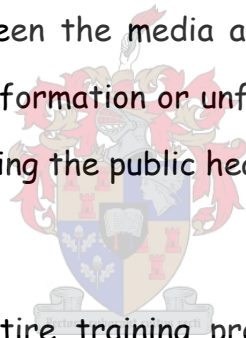


The course is designed to provide national (drug) regulatory (NRA) authorities and national immunisation programme (NIP) managers and other appropriately selected public health workers with the necessary skills and information needed to deal effectively with AEFIs.

To address safety concerns, the training was packaged so that participants learn how to deal with rumours and real crises such as situations where injection practices have been unsafe. The team realised that regardless of what country the participants come from (also whether from the developing or developed world) it

had to find a basic common approach that would address all types of issues. This would have to take into account differences in health systems, drug surveillance and in media systems. Then of course, countries have different cultural norms and practices and socio-political issues that impact on health programmes.

On the media side, technological advancement, such as the Internet, is also a matter to consider for now and the future. News travels fast and although many people in the developing world do not have access to the Internet, the technology is still available to some. A badly handled AEFI experience in one part of the world, whether it is real or perceived, can have reverberations on the other side of the world at the click of a button. Lack of science training for journalists and acrimonious relationships between the media and science/health professionals is fertile ground for inaccurate information or unfounded rumours to make their way into the media, effectively putting the public health in jeopardy.



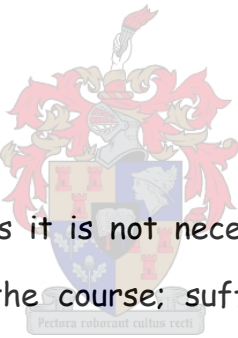
Briefly by the end of the entire training programme trainees should have an understanding of the importance of and the respective roles of the NRA, the NIP and other role-players in ensuring the safety of vaccines used in immunisation programmes. They need to be able to promote collaboration and communication between: the NRA; the NIP; the Ministry of Health; other health professions; the media; patients and parents; and the public.

Finally, they have to devise a draft plan for developing or strengthening a national immunisation safety programme for implementation on return to their countries. This would include a media plan.

## Design

The training combines lectures, problem-based workshops, discussions, role-play activities and intensive trainee participation. All the training material was peer-reviewed by an international expert panel to ensure that the content is accurate, relevant and up-to-date. Trainees are selected on the basis of being likely to effect constructive change after the course. To achieve this, GTN uses a multi-level screening process to ensure that the appropriate participants from priority countries are selected. The training institution and WHO GTN offices are also involved in the screening process.

## Structure



For the purposes of this thesis it is not necessary to go into detail about the pharmacovigilance aspects of the course; suffice to mention the basic course structure as this will give an idea of where the media section, which takes 1.5 days of the course, fits in. (For more details on all aspects of the course please refer to the addendum (CD ROM) accompanying this thesis).

In short, the training workshop consists of 17 short modules. Each of these deals with a specific topic (e.g. case investigation, causality assessment, risk-benefit assessment and decision-making). Each module has a specific set of objectives which are accomplished through various activities.

As a quick reference the modules (also see addendum) of the entire course are listed below to give a bird's eye view of the context in which the media training takes place. The media modules are listed in bold.

Module 1: Welcome and introduction

Module 2: Introduction to immunization safety surveillance

Module 3: Similarities and differences between vaccines and other medicines

Module 4: Overview of AEFI profile of vaccines used in immunization programmes

Module 5: Country presentations by participants

Module 6: Review of previous days activities

Module 7: Case investigation



Module 8: Review of actions taken during past experiences with vaccine safety concerns

Module 9: Basic principles of causality assessment

Module 10: Understanding basic principles of risk-benefit assessment, and decision-making

Module 11: Risk perception by patients and parents

Module 12: Evaluating the vaccine safety literature

**Module 13: Communication skills: introduction**

**Module 14: Communication skills: working with the media**

**Module 15: Communications and media planning**



Module 16: Developing a strategic response to AEFIs

Module 17: Establishing a way forward, thanks and closure

### 5.3 Communication Training

The training materials for the media section of the course were devised by the author with the help of WHO materials (John Clements and others) and two South African journalists, namely freelancer Megan Russi (TV) and Jo-Anne Collinge (a former newspaper journalist and ex-spokesperson for the South African Health Minister Manto Tshabalala-Msimang).

The materials are continually updated and improved upon. In addition, the materials are adapted according to the country/ies that are taking part.

Although 1.5 days are devoted to media training, the course is structured in such a way that discussion on and attitudes to the media begin to surface on day one of the training course and are referred to throughout, making media issues an integral part of the entire course. The problem-based component of the course involves actual cases of vaccines "scares" and other AEFIs which have been reported in a number of countries (See Addendum: Participants Manual, Module 7: pp 19-25) and in which the media have been involved. The participants therefore work out how to deal with the media based on real problems. The training allows for long discussion about experiences of dealing with the media and participants from different countries have the opportunity to share their experiences and learn from each other.

## Objectives

The objective of the media section is to equip the participants with the necessary awareness and knowledge about how the media works and the necessary skills to engage the media.

An important function of the training is aimed at trying to bridge the gap between the media and the health officials by giving them an understanding or a "taste" of what journalists do, the constraints they work under and what information they will be required to give journalists particularly in times of a vaccine scare or what is often tantamount to a crisis.


The rationale behind the delivery style of the course, in other words the facilitation technique, is that the participants should hopefully take ownership of the training. The idea is that learning can only take place when the participants take responsibility for their participation in the course.

## Design

To this end, a number of issues are discussed including the editorial system, deadline pressures that dictate the life of a journalist, the dearth of trained science and health journalists especially in developing countries, the need to speak in language that is simple and coherent, the need for experts to be on tap and officials readily accessible to comment especially in times of crisis. The need for a

competent, informed and available spokesperson is driven home. Ways to respond to biased journalism are suggested.

The author uses a specific technique based on invisible theatre to create an awareness and understanding of the role of journalists. Other media facilitators may prefer to use the suggested technique (see addendum: participants manual: module 13 pg 26) of giving participants a chance to interview a real journalist about their work. This is an example of how the materials can be adapted to achieve the stated goals as outlined in the Participants Manual (See addendum Module 13 - 15). The length of the course has also been changed from 1.5 days to 1 day (as in China) depending on the needs of the participants.



The course is very practical and participants are required to simplify complex messages, write key message and use these for their press releases ( based on one of the cases they are given at the beginning of the course). They are expected to deliver their press release in a simulated press conference. Each participant's body language as well as the ability to frame key messages is assessed by their colleagues.

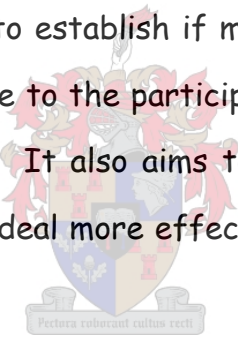
In addition, they are asked to answer difficult questions asked preferably by a real journalist about the case they have been working on. The participants are given a chance to answer these questions "live" on television. They are given a chance to see how they did and everyone assesses and discusses their "performance".

Rumours and crises are discussed in depth as part of the communication course and participants are shown how to draw up crisis communication plans and longer term communication plans. Their final plans must include how they are going to form partnerships with the media in future. (See addendum Participants manual Module 13 - 15 for specifics of the objectives and desired outcomes of the media training).

## **5.4 Assessing the impact of the training**

### **Objectives**

The main goal of this thesis is to establish if media training for scientists/health professionals makes a difference to the participants understanding (awareness) of and attitude toward the media. It also aims to find out if the participants feel that the training will help them deal more effectively with the media in the future in the interests of public health.



To do this the author went about finding out what the trainees and facilitators' attitudes to and experiences of the media were before the communication training programme and what their attitudes and awareness of the media are after the training.

The research aimed to find out if participants were more aware of journalists' needs after the training. They were asked what aspects of the training worked and which did not. They were also asked about what skills, if any, they felt they had learned. This information could be of great use in deciding how to improve the

course in future. It could also be adapted for scientists/health professionals not in immunisation and vaccine regulation but in different areas of expertise.

The thesis will also provide the first attempt at assessing the impact of the WHO vaccine surveillance programme to date. It will also give the first indication, albeit descriptive, of how scientists/health professionals view the media across countries with different media systems in terms of vaccine safety.

## **Design**

Quantitative research was difficult for logistical reasons in that the training has thus far been conducted in over 70 countries and English is the second language for the majority of the 277 participants. Also, there are difficulties in finding indicators that are universally appropriate. The training can also only really be assessed when a crisis arises which does not always happen and everything else would be a surrogate marker. For example, we may try to find out if the country has developed a communication plan post training but, this would not necessarily reflect whether the plan actually works.

In addition, several factors impact on impact. The training will depend on whether or not the countries' health departments are receptive to what the participants have learned. Will they be able to or be given permission to implement lessons that have been learned? It also depends on the needs or the perceived needs of the countries at any particular time.

It was decided that the best way forward for method was to do qualitative research. This consists of semi-structured face-to-face interviews and telephonic interviews, focus groups and in-depth interviews. (See Appendix A for a list of people interviewed).

A total of 15 people were interviewed, one of whom was a journalist from Beijing in China.

The author attempted to get a spread of interviewees so, those willing and able to participate in the research come from different countries and continents and were trained at different centres and at different times. The interviewees were from China, South Africa and Ghana and had received training either in South Africa, China or Sri Lanka. Some were trained in 2005, others in 2004 and others even before that. The already stated objective was to put together training that had a basic common approach that would hopefully address issues regardless of culture, media systems and language.

The same basic questions were asked of all interviewees (please see Appendix B) except for the Chinese journalist who was interviewed over the phone about the media in China.

The Chinese focus groups were conducted before and after training for Chinese participants only. Other interviewees were trained together with participants from other countries.


## 5.5 Interviews<sup>1</sup>

### Focus groups

(Please see Appendix A for a detailed list of people interviewed and Appendix B for a list of the questions they were asked.)

The two focus groups were conducted in Langfang about 50km outside Beijing in Hebei province in the Peoples' Republic of China in 2005. The author was in China at the time for the first WHO AEFI training course in that country. The course materials were translated into Mandarin and were given "nips and tucks" to suit the participants' needs.

There were two training sessions.

- 
- 1) A training of trainers course in AEFI (TOT), and
  - 2) The first AEFI training course for 10 provinces

The TOT course served two functions - i.e. to train the trainees on the content of the training as well as to provide them with the skills to conduct such training for the first training course that would take place immediately after the training. There were approximately 14 participants in the TOT course. The first national

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<sup>1</sup>It is customary for Chinese people to be addressed by their full names. The author has chosen to abide by this custom in the text where Chinese interviewees are referred to. In addition, the family name is written first followed by the given name. This name order is adhered to in the reference section.

training course included 41 participants from the 10 provinces. Participants were from national and provincial level.

Focus Group A consisted of five senior personnel, all experts in their field in immunisation (see Appendix A). They were part of the TOT group.

Focus Group B (see Appendix A) comprised four participants from the second training group.

The training workshop organised for the trainers and lasting 4 days was given and facilitated by the WHO technical advisors (Dr Ushma Mehta and the author Adele Baleta). They also assisted the trainers in the first training workshop of its kind in China.

Participants were asked to volunteer for the focus groups. The ability to speak English was an important factor. The author also asked Dr Ni Daxin from China's WHO office to assist with translation where necessary. Mehta took notes.

### **Semi structured interviews**

(Please see Appendix A for a detailed list of interviewees)

**Professor Yu Wenzhou:** (face-to-face interview) attended the TOT course in Langfang but had also been trained at the UCT training site in October 2004 with the author as lead media facilitator. At the UCT training Professor Wenzhou's co-trainees were from Afghanistan, Ethiopia, Uganda, Myanmar and Angola.



**Dr Guo Biao:** (face-to-face interview) attended the training at the Sri Lanka site in Colombo in July 2003 with trainees from other countries.

**Dr Karen Cohen:** (face-to-face interview) She has been a facilitator for the medical side of the training but has been exposed to the media training over a number of years.

**Dr Ushma Mehta** (face-to-face interview). Dr Mehta is a WHO co-facilitator with the author. She has never had media training but has been exposed to the WHO media training since the programme's inception in 1999.

**Dr Alex Dodo:** (telephonic interview) who is from Ghana did the training at UCT in 2002 with the author as lead media facilitator. The questions were sent to him via e-mail and this was followed up with a telephone interview. At the UCT training his co-participants were from Poland, Bulgaria, Turkey, China, Vietnam and South Africa.

**Dr Phillipe Duclos** (telephonic interview). A list of the questions was e-mailed to him in Geneva at WHO headquarters and this was followed up with a telephone interview.

**Mr Han Bin** (telephonic interview), a Chinese journalist.

## 5.6 Conclusion

If children's health is to improve worldwide, vaccines to fight debilitating and life threatening infectious diseases have to be made available to all children. But, the vaccines themselves have to be safe and safely administered. The media will call immunisation officials to account for negligence in this regard. However the media in their reporting can get the story horribly wrong and do untold damage to health programmes. Acknowledging the critical importance of vaccine safety, the WHO devised a training programme on establishing/strengthening immunisation safety surveillance programmes. A vital and integral part of this programme is training health professionals on how to deal with the media. In the next chapter which presents the findings, trainees from all over the world assess the training from their perspective.



# Chapter 6

## Pre-Training Findings

### 6.1 Introduction

The aim of this study is to establish whether the WHO media training programme makes any difference to the participants' understanding of and attitude toward the media and whether they feel it will help them deal more effectively with the media in the future in the interests of public health. To get some idea of the impact of the training, the author needed to find out how participants felt toward the media prior to the training. This chapter presents the participants' comments and experiences of dealing with the media before the training. The interviewees were asked to describe their interactions with the media pre-training and whether they felt the experience had been negative or positive. Most of the interviewees (12) had dealt with the media before the training and most of them except one had not had any media training before the course. The Chinese participants had been trained on how to do advocacy work but this was regarded as different to learning how to handle the mass media.

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*The media is like a sword, both sides are very sharp. If it is good then it is very good for you and if it is not good, it is very bad for you.” - Professor Zhou Jiantong (2005 - Interviewee).<sup>1</sup>*

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<sup>1</sup>It is customary for Chinese people to be addressed by their full names. The author has chosen to abide by this custom in the text where Chinese interviewees are referred to. In addition, the family name is written first followed by the given name. This name order is adhered to in the reference section.

## 6.2 Attitudes and experiences pre-training

Dr Alex Dodo, from Ghana, who was the only participant in his training group (UCT, 2003) to have dealt with the media prior to training, expressed many of the same frustrations with journalists that were articulated by physicians in *Under The Microscope* and health science researchers and scientists in the *MRC* and *Worlds Apart* studies described earlier. In essence, Dodo (2005).felt journalists were lazy, sensationalist seekers and ignorant of health science issues to the detriment of ordinary people

Dodo says:

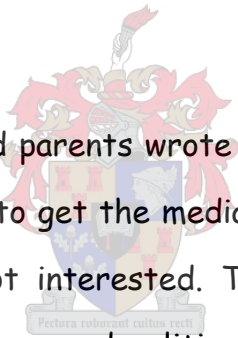
"I used to find it very difficult to talk to journalists in Ghana and to work with them. What struck me was that they were not the least bit interested in covering health issues which they seemed to find difficult and deadly boring. Drug and vaccine safety was completely ignored by the media because they found it too complex to understand. Politics and corruption stories are more important to them. I became friendly with some of them but even then they were not interested in taking up health issues. We did manage to get some stories in but only three or four - nothing major."

Dodo (2005) advanced reasons for the state of health journalism in his country saying that there are too few journalists that are under pressure to cover stories in Ghana. This already shows his willingness to look beyond the tussle to try and appreciate the constraints that journalists in his country operate under. There is little training for journalists in the country.

Although media restrictions were lifted in 1992 in Ghana, with the introduction of a new constitution, health news appears to be a luxury. Today there are four TV channels, more than 20 FM radio stations, four national newspapers and many of the media outlets are privately owned.

To survive amid increased competition, the various media operate with a "lean staff". There is only one newspaper for example with a health desk and even then the journalist/s only covers issues relating to women and children. There are no specialist health reporters. This means one can never establish a relationship with a single journalist on a health beat/desk.

Dodo (2005) says:



"On one occasion concerned parents wrote to the government enquiring about AEFIs and we tried to get the media on board to respond to the queries, but they were not interested. They were focused on doing stories on corruption, bribery and politics. When we have managed to get a story in, the information has been inaccurate and there is no analysis.

"Reporting about health issues can be a catch 22 situation. In the case of AEFIs, for example, lack of media attention is positive on the one hand because there is no sensational, inaccurate reporting that causes panic and a fall off in the immunization rate. But, it is also negative because we cannot do any health advocacy work which would go a long way to answering the public's concerns about drug safety or other matters that affect their health."

Khanna (2001: 51) has highlighted problems of getting health messages out via the media where literacy levels are low and science journalism is not well established, and communicating research findings to the general public poses a considerable challenge.

In Ghana the literacy rate is about 50%. Dodo (2005), says a study was recently conducted in Ghana where 60% of a sample of 2000 people said they got their information from the radio, 10% from television and 8% from newspapers.

Perhaps the most important source of strain between scientists and journalists lies in their different views about the media's role. Scientists expect to control the flow of information and expect journalists to write what they tell them (Nelkin, 1996).



Dodo (2005) says:

"The media spoils our stories by taking a different slant and sometimes what we believe is an important story lands up as four paragraphs next to the obituaries. They also write inaccurately. We went to great lengths to make sure that they have accurate information by printing out the correct information and they will still get the basics wrong like the names of vaccines and drugs."

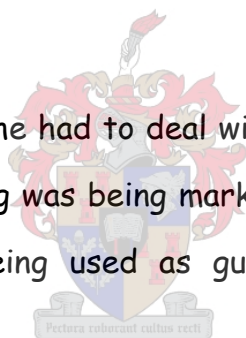
It's pertinent to mention that Ghana and South Africa are regarded as having a free press and in the case of the former, a particularly active media. This was not the case over a decade ago when the media was strictly controlled (not free) under apartheid laws. In the latest Freedom House report (2005), both countries are at

position number 58 worldwide. The report ranks countries on a scale from 1 to 182 indicating countries which are free from position number 1 to partially free to not free ending at 182.

Like Dodo, Dr Ushma Mehta (2005), from South Africa, has also had some trying times with journalists. As former head of the National Adverse Drug Reaction Centre at UCT in Cape Town, Mehta was often questioned about drug safety. She recalls two negative experiences:

"Until the media training, my standard position was don't speak to me, speak to my boss, I would refer the journalists on with the contact details."

There was an occasion where she had to deal with a magazine journalist who called to inquire about whether a drug was being marketed without adequate information and whether humans were being used as guineas pigs by the pharmaceutical industry.



Mehta says:

"It was a real challenge for me to address. When I saw the printed article, there were only excerpts of what I had said and the story had a very negative slant which I was hoping to off-set with some of my responses.

"In hindsight, (and after the training), maybe I had not given a sexy enough response or had not managed to shift the focus. I suspect that she had made up her mind about what she wanted to say before

interviewing me. I did not have much interaction in discussing that with her either. I just answered the questions without considering her perspective.

"There was complete naivety from my side in terms of understanding the media and what they were driving at. If I had more understanding of how the media works I think that I would have firstly, got more information from her verbally before answering her questions. Secondly, I would have tried to explain to her the implications of what she was going to communicate and what her readers would understand by her article. I would have changed things a bit from my side.

"With the second interview the journalist said she knew I was not allowed to speak to the media, but asked if I could at least confirm that I was investigating the issue of the date rape drug called Rohypnol. I confirmed that I was. She then began providing me with information that would have been valuable for my own investigation so, I expressed interest in knowing more.

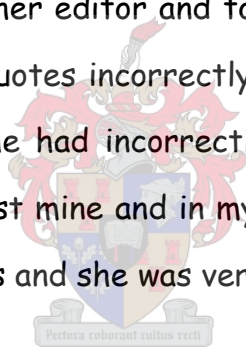
"The media refers to the drug as Rohypnol but from my perspective as a regulator, Rohypnol was not the only drug that was being abused and, in fact, it is only one manufacturing brand. If I had been quoted as saying that Rohypnol was dangerous, I would have been jeopardising my position. The point is, that it was flunitrazepan, the ingredient which is marketed as Rohypnol and which is used in two or three other products, that was the problem. As a regulator I could not be shown to undermine



or to be partial to any one particular product. Rohypnol is only one of many similar products.

"The journalist did not have this insight, so there were a lot of dangers in communicating with her. A month later, she said she had attributed to me the information she originally gave me. She was trying to put the words in my mouth. So there was a flat panic as this could have led to the Department of Health being sued by the company.

"It was her speculation and not mine. I was not sure what the ethics of this were. So, I wrote to her editor and to my boss and she replied by fax that she never used quotes incorrectly and she had notes to prove it. I was adamant that she had incorrectly attributed information to me. It was her word against mine and in my view she was lying. She did not end up using the quotes and she was very upset.



"In retrospect, not being allowed to speak to the media was probably a good thing, because I had not been trained on how to do so. However, it was sad that the message of concern, never went out to the public in a manner that could have benefited public health. It also meant that women could not be warned about the abuse of this drug and that they should be on the look-out for date rape."

Mehta tried to get a warning out to the public via the media about the abuse of drugs for the purposes of date rape.

She says:

"I wrote a press release warning women to take precautions when at clubs and other public places. If I had known more about communicating these public health messages through the media, more people would have been reached. The message was sent out during the Christmas holiday season. Journalists did not seem to bite so there was no wide-scale coverage of the story. I feel that our message did not get across as strongly or as early and as clearly as it could have. A few years later, date rape using rohypnol was widely covered as a rampant and rife activity. It means that we could have had a much stronger campaign had we had the resources and the know-how of dealing with the issue. I felt the journalist had a hidden agenda, I could not trust her and yet she was regarded as a highly respected journalist."


Dr Karen Cohen (2005), the former clinical-co-ordinator of the ARV programme in the Western Cape in South Africa, says she has been lucky with her interactions with the media so far.

She adds:

"I don't think I have ever had a run-in with a journalist that I thought was unethical or sensationalist. I have actually had a very positive experience with the media. It was interesting that when the nevirapine resistance discussion was happening in Bangkok at the World Conference on HIV/AIDS in 2004 and all the journalists that had gone with the South African delegation were trying to put stories together. The material was complex and it was difficult for doctors to get their heads around the issues, let alone having to translate the information and convey it to ordinary people."

I was really impressed by the care the journalists took when they came to speak to me in trying to construct things and how carefully they were trying to get their stories right. I think that in this country within the journalist community there really is a strong standard of ethical conduct and a feeling of trying to work toward the goal of improving health. I really feel that strongly."

The following interviews were conducted in focus groups in China in April 2005 in Langfang City and the author has, where appropriate, described the way the participants answered the questions to give an idea of the group interaction and dynamic.



At this point it's germane to mention that China is "not free" in terms of media freedom according to Freedom House (2005) and ranks very low at 177 out of 182 countries. Mr Han Bin (2005) is a medical reporter at the state-owned and run CCTV station in Beijing.

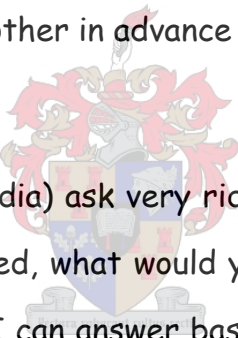
Han Bin says:

"In China there is no media that is privately owned. It is easy to get government policy into the media as the media is regarded as the government mouthpiece. It is seen as a service to popularise the government and its policies. In the past, the Ministry of Health would release facts and figures. But things are changing because the Chinese media want real stories now."

Dr Liu Dawei (2005) from Beijing in China's Hebei Province has had experiences of both local and international media. Significantly, he was at the forefront of dealing with the media in Beijing during the height of the SARS outbreak in China in 2003.

Liu Dawei says:

"Before we began immunizing children with the meningococcal vaccine, the media interviewed me about possible vaccine reactions because the public were concerned about the safety of the vaccine which had only been in use for two years. My job was to communicate new information about the vaccine. Many reporters came to my office. (Laughs nervously). They phoned before asking whether they could interview me. It was a friendly experience because we had communicated with each other in advance of the interview.



"Sometimes they (the media) ask very ridiculous questions such as 'If a serious reaction occurred, what would you do about it?' This is very difficult to answer. But, I can answer based on my background and my understanding of this vaccine."

Professor Diao Linqi (2005) from Henan Province has been interviewed on many occasions by both the electronic and the print media.

He says:

"In 1997 and 1999, I had to speak to the media about injection reactions which involved more than 20,000 school children. I was asked to comment on parent's claims that (encephalitis) was caused by the vaccine. The parents said that all these children developed encephalitis and had not been hospitalised. It was a negative situation.

I replied that our investigation showed there was no link between encephalitis and the injection. But, the media did not worry about my response - they only wanted to know that the event was caused by the vaccine. (Everyone laughs nodding their heads). No matter what we said they wanted to believe it was the vaccine. Sometimes we have positive responses. For example, on April 21 is a national immunization day for China - we can do positive reporting for the programme."

Dr Cui Fuqiang (2005) from Gansu province felt that most journalists write positive stories about immunisation but "not all of them".

Diao Linqi (2005) says that five years ago it was difficult to get health messages into the media.

But now, he says:

"It is very easy if you want to present some news for newspaper or television. I think things are opening up. Newspapers are focusing on everything. They want to have news about everything."

Dr Ni Daxin (2005) from the WHO office in Beijing advances two possible reasons for the changes in media operations. He says that in the wake of the devastating impact of SARS, there was a "government requirement" to have positive health stories in the news. According to him, more of the media want to develop positive relations with the health department in order to get more health stories. He called this "propaganda" but in a positive sense and the interviewer understood this as advocacy journalism.

Diao Linqi agrees saying:

"Our province Henan, has 8 channels and more than 6 newspapers in the capital city alone. So they are always looking for stories to cover."

Professor Zhou Jiatong (2005) from Guangxi province has been interviewed about EPI campaigns and about AEFI.

He says:

"In mass EPI campaigns it is a government requirement that this news is placed in the media. In the case of the AEFI, the media got the news from the parents and it became negative but after an interview with me was published they changed their ideas. We managed to turn the negative situation around."

Dr Tao Lina (2005) from Shanghai in Jiangsu Province echoes many of the negative perceptions of the media that scientists and health practitioners voiced in the US studies - *Under the Microscope* and *Worlds Apart* - discussed in the Literature Review (see Chapter 2).

Tao Lina says:

"In the past, I think media always tell wrong things, they tell the negative things. I have never been interviewed but my colleague has and when she read the article in the newspaper she was upset to see that it was not what she said. We all wondered why they wrote such things. It was such an embarrassment. Now, we always ask journalists to first send the article to us before they publish the information. Now, in the CDC, there is a rule that anyone who is to be interviewed by the

journalist must first report to the general office and if this office says its OK then the journalist can go to the department and have an interview."

Before the training, Cui Fuqiang (2005) was determined to avoid journalists - whom he clearly did not have a high regard for - at all costs.

He says:

"I did not want to talk to the media. We are technical professional staff and we want to make sure that it is accurate information. We get upset when the incorrect and inaccurate information is communicated. Sometimes the media mistakes my information and then blames me.

"I get asked at work why I wrote such things in the media. My boss says I am responsible. So I prefer to avoid them."

Diao Linqi (2005) is slightly more conciliatory. He, at the very least, recognises that public health officials and journalists have different work ethics and cultures.

He says:

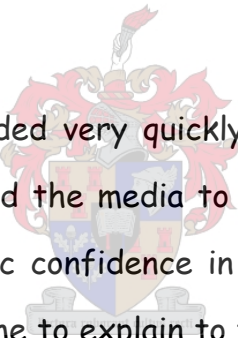
"They have a professional job. It is not like our profession. They want to make news. Maybe it is not news. They want to create sensation for their publication. Sometimes I don't want to be interviewed. When I explain the information it does not turn out to be the way that I explained it."

Almost everyone in Focus Group A was involved with SARS which interestingly was perceived as a crisis by some and not by others. In the playful bantering during the group discussion, the author sensed an element of competitiveness

between these directors of health in the various provinces as to who was the most successful in dealing with the media during the crisis. This could have masked some of the real problems experienced in getting constructive messages through to the public during the crisis. They all agreed that SARS changed many things in China, especially the growing need for relationship-building between the media and the health department in times of crises. Following SARS, many people wanted media training.

The first SARS case originated in Guangdong Province, which borders on Zhou Jiatong's home province of Guang Xi. As a senior member of the health department he was close to the action.

He says (2005):



"Guang Xi Province responded very quickly. Our provincial government issued a statement and told the media to tell the truth to the public. This helped to instill public confidence in the health authorities. The media needed me at the time to explain to the public what was going on. It was a difficult time for government, the health bureau, and clinicians. The media is like a sword - both sides are very sharp - if it is good - very good for you. If it is not good - it is very bad for you.

Diao Linqi (2005) said that before the appearance of the first case in Henan province, there were daily stories in the newspapers about cases in Beijing and Guangdong which gave the province an idea of how not to handle the situation.

Diao Linqi says:



"When we had our first cases we informed the media and the public about the progress of these patients in hospital. At the time, we chose to manage the situation by keeping the public informed."

Tao Lina: (2005) says Beijing had many cases but Shanghai had only a few, and yet the "whole world" focused on Shanghai which is an economic hub in China. He was confident about the way the provincial authorities managed the crisis.

"In Shanghai there was a municipal spokesman and we as the technical department gave technical information to the health bureau - who spoke to the spokesman. The spokesman said there were only 7 cases. They spoke with one voice."

According to *Time* magazine (Lemonick & Park, 2003) provincial government sources said they were under pressure to present the densely packed city of Shanghai as "SARS-free". The number of cases reported at the time, were two confirmed and 15 people were suspected of having the disease. Beijing was a focal point during the SARS crisis as it had the most cases and as well as for the fact that the world's media descended on the Chinese capital. Liu Dawei (2005) had the lion's share of dealing with the media as compared to others in the group.

Liu Dawei (2005) says:

"There were differences in provinces. (Everyone laughs in acknowledgment that he had the greatest challenge). In the beginning, there were a number of cases that were not reported so the journalists blamed the authorities for hiding the cases and for not getting the real information to the public. The media wrote the story and people

panicked. On April 20 the health minister and the mayor of Beijing were fired. In the past, I did not like to be interviewed by the media but after the SARS outbreak I changed - a lot. I need to be able to communicate with them because if a disaster or a crisis occurs and the situation is very difficult to control, it will become even more difficult if the media is involved."

Dr Guo Biao (2005) had received training in Sri Lanka in 2003, and prior to training she had little contact with the media over tendering for laboratory equipment for HIV/AIDS. Although she did some training in health promotion activities given by the health bureau, the WHO programme was the first formal media training she has attended. After Sri Lanka she has not personally dealt with the media because that is her director's function.

She says:

"Before the training, I felt that the media liked sensational information, fast news. Sometimes they report untruths because they want the news too fast. Before they have the facts they write their stories. The media could threaten us if they get the facts wrong. Luckily, I have not had this experience yet. Before Sri Lanka I knew a bit about how journalists work. There are times when they get news wrong because when there is another report, it's completely different from the one before. This causes controversy and we all get confused about the difference. I never really understood the job of a journalist."

Professor Yu Wenzhou (2005) had not been trained in how to deal with the media before his participation in the 2004 training in Cape Town South Africa.

He says:

"Before this training course, I had a different impression of the media. I felt the media wanted to find faults in our work. Some articles do not accurately report adverse events (AEFI). Maybe they had their own ways of evaluating the adverse events. So, this is not objective. So we avoided communicating with the media."



# Chapter 7

## Post Training findings

### 7.1 Introduction

This second part of the findings presented in this chapter shows the impact of the training course. Participants were asked if their attitude or perceptions about the media had changed in any way. They were also asked what the strengths of the training were. They were asked how the programme could be changed. Trainees who had participated in the training some time back were asked if they were able to use or implement any part of the training. Those who had just received the training were asked if they thought they could tell their colleagues about it or make changes that would incorporate this training in some way.

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*"This training is crucial. ... It is better to train one journalist in resource-poor countries than 10 doctors. We have few doctors and we need journalists to help us to inform people about health issues." - Alex Dodo (2005 - Interviewee).*

### 7.2 Attitudes and awareness

Dodo (2005) says that the training has shifted his awareness and knowledge about journalists and the media culture.

"What struck me after the training was that although I have worked with journalists in the past, I did not know what the principles of journalism were. Now I do, and it makes a difference in understanding what drives the media. It makes it easier to know how to approach and respond to them. Following the Nigerian crisis (when people were

refusing polio vaccine for fear of infertility) we realized that it was too important not to include media training in our courses in Ghana."

Tao Lina (2005), who before the training felt that journalists embarrassed scientists by writing inaccurate information, had this to say after training:

"They (the media) tend to tell the truth when they get the right information and when we speak clearly to them. They don't want confusion. They're willing to report things to make things better. I learned a lot about what the media is like and I think I can make better relationships with them now after this training. I will want to be more active in making the relationship with the media work better."

Rather than adopting a patronising attitude to the media, Tao Lina's reference to journalism as a profession comes across as respectful.

He says he recognises the need to develop ties with the media:

"Journalism is a very difficult professional job. Only they put more attention to things that we would not worry about. If they were not so professional we would not do anything about it. We need to talk to them because their job could harm the EPI."

Ciu Fuqiang (2005) felt a lot more conciliatory toward the media after the training. In the past, he said he wanted to avoid the media at all costs (see previous chapter).

He says:

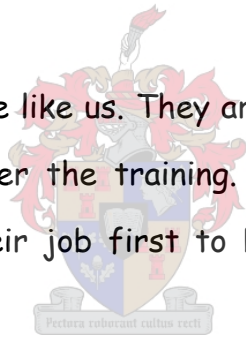
"I learned what a journalist is really like. Before this, I have many friends including journalists but we never discuss professional issues,

like what they do and what their intentions are. I never ask them about their job, about what they do. Now, we know what the journalists are thinking and what they want from us. It will be easier to approach journalists with more confidence (all interviewees nod in agreement). I think the journalist is concerned with what the public is concerned. There are those journalists who want to be accurate."

Zhou Jiatong (2005) felt "very different" about the media after the training especially on how to deal with them during a crisis. Although he had many encounters with journalists in the past, he feels that he now understands the media culture a lot better.

He says:

"I know that the media are like us. They are responsible to the public. I feel this more now after the training. We needed to understand what journalists do in their job first to be able to co-operate with them."



Mehta (2005) says the course "demystified" the media for her.

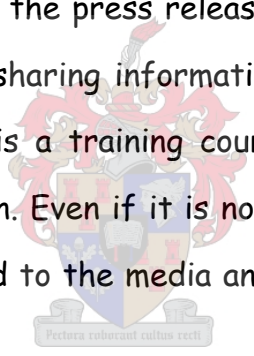
"It has also minimised my fear of the media. I understand why journalists do what they do, and I have especially understood the two negative encounters I had in the past (see Chapter 5: 61-63).

"In the one interview, I was answering the questions like a good employee. This does not mean I will be dishonest about information in future. But, I will give a better framework and a context for my answers. I will also try to understand the journalist's agenda more clearly before answering questions. I will try to give clearer answers

rather than stock responses which are probably quite boring and unhelpful.

"Having interacted with a journalist on social level helps me understand that journalists are not ogres. I have begun to get to know how they think, what they want and what their priorities are. I feel more confident in dealing with media queries and have often taken the initiative of writing a press release where others have floundered or been concerned.

"My motivation for writing the press release has been public safety. I am more proactive about sharing information and less reactive. I will alert the press if there is a training course or a meeting that the public may be interested in. Even if it is not page one news, at least I feel I am extending a hand to the media and showing that I am willing to communicate."



Both Mehta and Cohen said they had learned to appreciate the pressure that journalists face on the job.

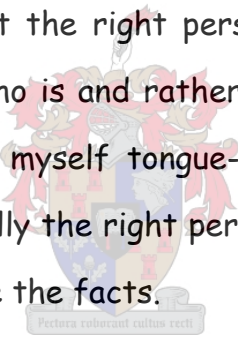
Mehta says:

"I do have a better understanding of journalists' deadline pressure but it's still difficult because sometimes you cannot get the information, sometimes it is not always available to you when you work in an organisation."

Cohen says:

"The training has helped me to see where the journalists are coming from. I have learned that if they phone me, I will not leave them waiting but would make an effort to phone them back because I have a deeper appreciation and awareness of the deadline pressure they work under.

"It's also made me more circumspect about what I say. I am aware that the person on the end of the line has got their agenda and I have got my agenda and they are often quite different. Before the training, I used to feel the pressure that I had to comment myself but I feel free now, that if I am not the right person to comment I can pass them onto someone else who is and rather spend my time facilitating that process than getting myself tongue-tied into trying to discuss issues when I am not actually the right person to do it. I don't want to speculate when I don't have the facts.



"I found the presentation of the media with its own code of ethics and its own set of principles, juxtaposed with where one is coming from as a policy person or as a scientist or as an academic or as a doctor, very useful.

"It's useful because it shows the journalist is not just a person pestering you at the end of the phone or waving a microphone in your face. It's a person trying to do job with a set of ethics and a set of principles. In the same way that I function as a doctor, with a set of



principles and ethics, so do journalists. I suppose being sensitive to that and having a bit of an understanding of what those principles are, is very useful in terms of what you say and what you don't say and how you say things."

Mehta (2005) says she has become more aware of who the media are and what they are after in interviews:

"I think I have become more intuitive about journalists. Now I read the papers in a slightly different light. I am not as gullible. I am more critical of the media. I check to see if they have done their homework? Did the interviewer ask the right questions? Were they answered? Is this person fobbing off questions, bridging or spinning a story?"

Dr Xiong Huiyu (2005) says she had troubles with journalists in the past.

"I told the journalist everything I knew and that I did not know anymore. He reported what I said. My leader was not happy. He said I should not answer like that to the media. After training I realised that I can try to get more information from my colleagues first. I can always tell the journalists I will come back to them. I will ask him let me think about it first. After a couple of minutes I will involve him. I feel more confident about this now."

### **7.3 Training strengths & skills learned**

Dodo (2005) says the training course was about a lot more than just dealing with the media.

Dodo says:

"It taught me skills, the most valuable of which, for me, were how to frame key messages simply and how to be well prepared to face the media. When we first did this exercise, I thought it was a waste of time, but then I realized after the intense discussion, that having your messages clear in your mind is what's important and is not as easy as one would think."

Cohen (2005) found that the highly interactive nature of the training was a strength.

She says:

"There was a nice balance between material that was didactic and material that involved participation and it directly challenged people and pushed them into an area where they were not entirely comfortable but in a nurturing and supportive space. I never felt that people were being humiliated although they sometimes really did make fools of themselves. But, I think that people who struggled were always sensitively handled. I felt that the fact that people's comfort zones were pushed was really important because that is what really makes things stick in your mind."

Xiong Huiyu (2005) says that this training was different from any other training she has had in the past. The concept of interactive workshops and facilitation was very new to her. She said that in China information was usually shared in lecture situations. Education was more didactic.

"It helps me to think more and not only learn from the teacher. As a result of the training, I am eager to find out more information by myself."

Duclos (2005) says the media communication training course does not differ markedly in content with the others he has witnessed, but it has its particular strengths.

He says:

"The training is at best presented by real journalists and the training is problem-solving. There is a lot of interaction. The media is integrated into the course all the way and not just in the set modules on communication. The participants are constantly being asked to consider their relationships with the media."

"There is also work that is one-on-one which helps with people who are less inclined to take part. All exercises are facilitated and these are aimed at drawing out the participants. There is time for one-on-one tutoring. It's a time and place where participants can discuss their work experiences outside the office."

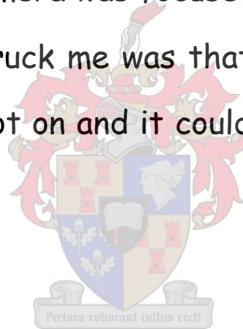
Diao Linqi (2005) and Liu Dawei (2005) found the section on answering difficult questions the most useful, saying it was important for health professionals at national, provincial and prefecture level to acquire the skill.

Cohen (2005) says:

"I think it was a very effective training process. The pushing of the trainees' comfort zones was really important, even for me, as someone who participated peripherally as a facilitator I found part of it very anxiety provoking especially the process of watching nervous people being interviewed. Where they came unstuck, made me aware of how I could come unstuck when put in that same situation."

Dodo adds to Cohen's point:

"I will never forget how Joy (a South African participant from the National Department of Health) cried when she was 'ripped apart' by the journalist while the camera was focused on her during the difficult question section. What struck me was that although this was not real life, the simulation was spot on and it could have been real life. It was very powerful."



"I learned that effective communication can be taught. It is not something you are born with. People can learn how to participate in interviews by learning techniques. The simulated interviews and press conferences were very important and the television play-back enabled people to see how they would manage in the real world, the mistakes they make and how to improve."

Cohen (2005) feels the formulation of a press release is the most important skill to learn. The process of framing messages, writing them simply, communicating them to the media and then dealing with queries and the fall-out afterward, was very valuable to her.

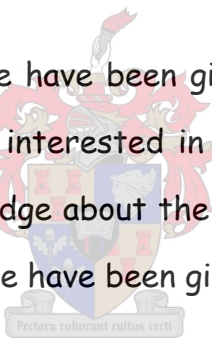
But, Tao Lina (2005) and others in his group felt that the detail of formatting the press release should be omitted as this function was done by the communications department in his province.

Liu Dawei (2005) agreed but added that the framing of key messages was a useful skill because once composed, the messages could be used in interviews on radio, television or over the phone. They were not just for press releases.

Zhou Jiatong (2005) says that the course gave him a very strong and clear understanding of media "ideology".

He explains:

"By ideology, I mean that we have been given a very clear idea about the media. We are not only interested in them professionally but we now also have a basic knowledge about the media and media skills such as writing a press release. We have been given tools to use."



Ciu Fuqiang (2005) adds:

"Now we can take these tools home."

Zhou Jiatong (2005) continues:

"Secondly for us, it is very new to have a journalist come in as a teacher and tell us what the journalist is thinking. This is very important to me."

All participants agree with Zhou Jiatong (2005) who says to the journalist (author):

"So, you are number one in China. This was the first time in China that a journalist comes in as a teacher. We have been trained in China about media, usually through the communications department, but we have never had a journalist training us."

Diao Linqi (2005) says:

"It's a fresh thing. It's best to include a real journalist for the training because it has more effect. It's difficult for me to answer about what journalists would do or how they think when I am not one myself. We would need to include local journalists in the training."

Mehta (2005) comments on the same point:

"Well it's a situation of the best information coming from the horse's mouth. It's less credible if it (the training) comes from someone in the health-care institution. If you as a journalist say this is what I want from you, then you cannot get training more powerful than that. Very often our facilitators are tempted to do the training because the information is basic and what they don't always have is the insight into the repercussions of certain messages or mistakes they make in communicating."

Cohen (2005) differs. She does not think it's crucial to have a journalist do the media training but feels that the quality of facilitation is key.

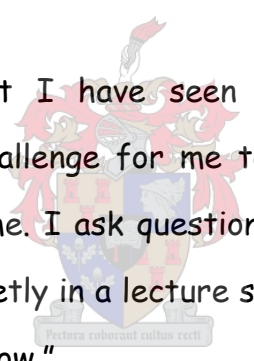
"I think what's important, is the distinction between a journalist and a good trainer. It's interesting to speak to a journalist as far as the training goes, but I think the reality of why the training works is partly because of good facilitation. I think it's useful for facilitators

to have a sense of how journalism operates in any specific country because that must set the tone for how you are going to deal with the material.

"But, the important thing is setting the training within the journalistic context of a country as opposed to having a facilitator from the country involved, but the reality is that it needs to be someone who can facilitate. It is good to have a journalist do the interviews but the important thing about the process is good facilitation."

Diao Lingqi (2005) says China uses the lecture method and facilitation is a new concept.

"It's the first time that I have seen facilitation as a learning technique. It will be a challenge for me to use this in training. Not everyone is the same as me. I ask questions and some people are too shy. Usually, people sit quietly in a lecture situation. I would like to try the participation method now."

A faint watermark of a university crest is visible in the background of this paragraph. The crest features a shield with various symbols, topped by a crown and a banner at the bottom with the Latin motto "Pectus roboret cultus recti".

Tao Lina (2005) says:

"This method of training works. People are willing to participate. They are trying to solve problems. Maybe they feel embarrassed a bit but they want to learn. We think they accept this method of training."

Dodo (2005) says:

"I think that heterogeneous groupings are ideal for the training in spite of difficulties like language differences. We had small working groups, and often we would disagree on issues which meant we had

debates and more learning took place. There were times that we had to work hard to convince our group members on certain issues. Infectious diseases are a worldwide problem, particularly in developing countries, so we have a common bond.

"It is good to exchange ideas with people, who are not from your country, but who are dealing with similar problems. The training has also been helpful in dealing with the WHO.

"We thrashed out issues but in the end we came back to the priority. No matter what media system participants were familiar with in their countries, the consensus was that learning to communicate effectively both internally and externally (with the media and others in society) is essential."

Mehta (2005) says that even if the media training does not cover all the knowledge necessary, it gives the participants the confidence to believe that it is possible to understand the media and to deal with it.

She says:

"It really stimulates ideas in the participants about how they can (approach the media with stories) especially those who have had little exposure to the media. They see the value of it (the media) and it generates ideas on how to improve their work through the media. I remember an Indian paediatrician at the Sri Lankan training who said: 'My goodness, I have got to do so much more with the media because there is so much more I can do.' For the first time, the paediatrician felt that he could access the media as much as dissidents or the government or big business are able to do. He realised that health

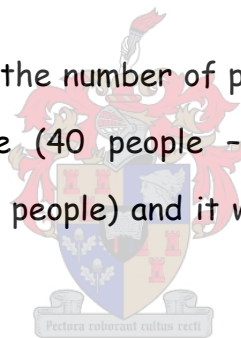


professionals have just as much right to put their stories out. It gives people a lot of power, it empowers participants.

"It (the style of training) is a very hands-on approach. The principles are practical meaning they are applicable. It (the training) delivers them in a very short period of time, the ability to draft a press release, to be interviewed by the media or at least to know how a media interview is structured and an ability to reflect on their strengths and weaknesses as communicators."

#### **7.4 Weaknesses**

Xiong Huiyu (2005) found that the number of participants that took part with her in the training was too large (40 people - which was well over the WHO recommended number of 16-20 people) and it was difficult to take part in all the activities.



She says:

"We will need time to train good facilitators to do this training. Not everyone needs this training so we have to choose the people that are suited to it."

There were differing views on the length of the training. The standard media training is set down for 1.5 days. In China the duration was adapted to last for one day only because of time pressure. Although the Chinese participants felt that one day was adequate, they wanted follow-up training.

Ciu Fuqiang (2005) says:

"One training is not enough because it is very fresh to us. The success of the training will also depend on the attitude and character of the person who will do the training in China. We need follow-up training."

Diao Linqi (2005) says:

"There is no training of this kind in China at the moment. We need systematic training especially for interview skills. I have many friends who work in radio, television and newspapers. Maybe I know something about journalists, but it is not systematic. There are gaps in our knowledge."

Liu Dawei (2005) says:

"I find it difficult to outline a media plan - this is maybe an area I would like to find out more about. Maybe this can be done as a follow-up."



Dodo (2005) says the media section was too short. He attended a 1.5 day session:

"I can see the value of having the media as a thread running through the programme, but I think the media section could be run separately as well. An extra day would have helped a lot."

"Also when you have up to 20 people in a group not everyone gets to talk. The more demonstrative people tend to hijack the conversation and you don't hear from the reserved people. There is not enough time"

to allow everyone to contribute. It would have been good if more people had had a chance to be interviewed on camera for example.

"Initially, I found the communication planning section a bit esoteric and then as time has gone by we have been able to apply part of it to our programmes. In Ghana, for example, we use aspects of the plan in our malaria programme. The communication planning section is an ideal that cannot be achieved easily or quickly.

Mehta (2005) agrees that the training is short but that it has to be seen in terms of the length of the whole training (5.5 days). She says a follow-up course is a good idea:

"We don't always get time to go into specific media like radio or to do social mobilisation like learning to design a poster. We mainly talk about crises. We don't go into much internal communications planning - but then again internal communication is institution specific. I don't think that this training is the way to go about that. This can be part of the follow-up training that people get.

Tao Lina (2005) thought that training on how to answer difficult questions was very valuable but said that there should be more concrete examples of good answers to difficult questions.

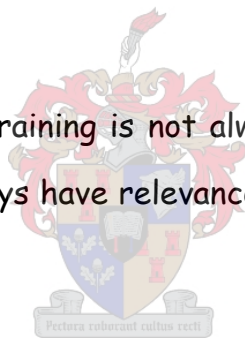
Diao Linqi (2005) says nothing should be taken out of the training. Although China apparently does much advocacy work in the media on health, he says it would be good to include training on health promotion in the media. He wanted training on

how to talk to government officials especially on policy and finance. He says he also wants to learn how to communicate with his boss, the school principle and to learn how to apply for jobs.

Cohen (2005) says that if there were weaknesses, they had more to do with people who were selected to come and do the course than to do with the training methodology.

"I think that there were people who were sent, although in reality one never knows, who would never interact with the media and who would not be able to work out why they were doing the media part of the course."

Mehta (2005) feels that the training is not always sensitive to individual country needs and that it does not always have relevance to the trainees in all the lectures and presentations.



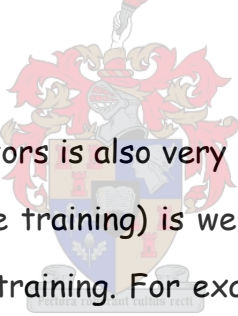
Mehta says:

"This weakens training. But on the other hand, this is strength because it allows countries to see their differences and makes them realise they can learn from other country's experiences. Russia can learn from Uzbekistan about how they dealt with a specific crisis. This could help them in the future.

"Communication systems differ across countries. You may need a different strategy for a country where the media is controlled compared with one which is an emerging democracy or one in which the media is starting to flourish.

Duclos (2005) echoes some of these sentiments:

"There are real differences which complicate the issue for us (language, culture, creed, free and not free media systems). But, there are enough basic commonalities across countries. The training is not meant to be entirely generic which is why we have tried to involve the local media from the host country, where possible. The idea is to have a common approach and to bring forward discussion with the local media in the countries and regions. I have attended training sessions in Tunisia where the interaction with the local media has been very good. The success of the training depends on who is attending, whether or not they are open and receptive to the information.



"The ability of the facilitators is also very important to the success of training. On average it (the training) is well received. There are some who may not even use the training. For example in Syria, immunisation problems are not an issue because the media only writes what the government tells them to.

"However, we cannot underestimate the political situation in any country. Anything can change, Government leadership can change and the media system can then change as well. One day the media is free to write what it likes and then the next day, it is strictly controlled. At the same time, there needs to be a critical look at how people read the media. They should not see the media as gospel otherwise problems like the MMR case can arise."

## Chapter 8

### Conclusions

*"This is a media training course in the context of vaccination. But, so much of the material is relevant to my field of work - HIV/AIDS - which is very controversial in South Africa. It is fraught with difficulties. Immunisation and HIV/AIDS attract controversy, and dealing with the media during crises is challenging for staff in both areas of health. It's about conveying quite complex information against a background of a lot of turmoil and controversy and communicating it honestly and effectively. I have seen the ramifications of dishonest and poor communication and it's not a pretty sight." - Dr Karen Cohen (2005 - Interviewee and a former clinical co-ordinator of the anti-retroviral programme in the Western Cape's HIV/AIDS directorate).*

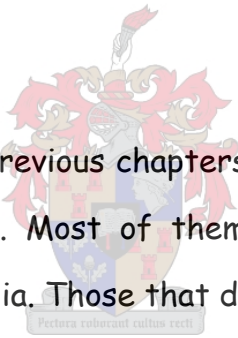
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The media training component of the WHO course on *Establishing /Strengthening National Immunisation Safety Surveillance Programmes*, set out to create an awareness and to impart knowledge about what a journalist's job entails and what the media culture is about. The rationale is that, if scientists understand who journalists are and what their job entails, they will be less afraid to deal with them and more able to handle them confidently in future. It's suggested that if both sides, scientists and the media understand each other better, the interests of the

public will be served better. Scientists need journalists to get important health messages to the community.

The course does not set out, by any means, to make the participants professional communicators but rather to highlight in a very practical way, the value of effective communication and the consequences of poor communication with regard to science matters.

The study also strove to give participants concrete skills to help them communicate more effectively with the media on science matters particularly with regard to health science.




Judging by the findings in the previous chapters, it appears that most participants were affected by the training. Most of them reported a shift in their initial negative perceptions of the media. Those that did not go so far, appeared willing to see the media in a more positive light. Some even elevated the status of journalism from a mere job to a profession. This harks back to complaints by journalists in two of the earlier studies (*Worlds Apart* and *Under the Microscope*) that scientists patronised them. The participants were also willing to acknowledge that journalists had a "difficult profession".

The study has thrown up important and novel observations. In spite of differences in culture, language and media systems, scientists in China and Africa (Ghana and South Africa) seemed to have similar negative views toward the media. There is a distinct difference between how they see themselves and how they see journalists. Even in China, where advocacy in the media is so much easier because the media is

state owned, the scientists still did not trust that journalists can do a good job. The tensions between the media and scientists - although poorly documented in developing countries - seem to be universal, and the conflict between the needs to be resolved in the interest of public health.

The trainees' expressed desire for more communication training is a positive response to this initial training. Follow-up training is needed and highly recommended to consolidate skills where necessary. Zhou Jiatong for example, has suggested that top officials, directors in China's Centre for Disease Control, would benefit from the training.

### 8.1. Training in action



A number of participants have been able to use the training to set up programmes in their own countries. Dodo (2005) says the training was very significant for him because since then he has been selected to sit on the WHO's Vaccine Advisory Committee.

In addition, he has used the idea of having not a public relations person or a government spokesperson but a "real" journalist - which he says is a key to the success of the training - to do the media training in Ghana.

"We have got journalists involved in our training here and we have also organised training for them in the field of pharmacovigilance. We began this training in Ghana in 2002 and then again twice in 2003."



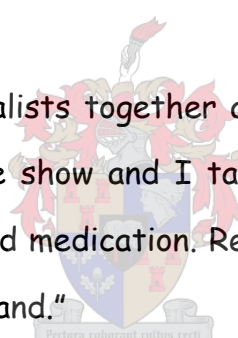
Dodo (2005) says that Ghana has a serious problem with selling over-the-counter drugs which includes scheduled drugs.

"The situation can be very dangerous and we need the media's help to get the message out to people about how to care for themselves, and how to make the right choices about their health."

Dodo (2005) has been proactive in this regard. He motivated for funding from an Aid organisation in the United Kingdom for a television programme called *Let's Talk About Drugs*. It is flighted on Ghana TV (GTV) from 7.30pm to 8pm on a Sunday.

Dodo says:

"We got actors and journalists together and we re-created a real-life drama. I am myself in the show and I talk about issues such as drug safety, patient's rights, and medication. Really, it's done in a simple way so that people can understand."



Mehta and Cohen (2005) prepared the key messages for a press release for the Western Cape Health Department. In the department expressed its opposition to the Matthias Rath campaign which sells vitamins to HIV/AIDS sufferers, in impoverished townships, as a cure for HIV. At the same time, Rath and his supporters reportedly dissuade them from taking anti-retroviral drugs.

Cohen says:

"It's interesting that although others added to and changed the press release, the final approved release reverted back to our original key

messages. The press release was snapped up by the media and used in publications and broadcasts around the world."

Those that have not yet been able to implement their training have expressed a desire to pass information on to their colleagues. When Tao Lina was to return to Shanghai after the training in Beijing, he said he will suggest to his department director that they begin devising a communication plan. "We have a plan but not a clear plan," he says. He also wanted to develop a crisis communication plan, something he had never heard of before the training.

Diao Linqi (2005) tentatively said he wanted to do "more positive" work with the media.

"I can tell many facts about EPI and AEFI. I only say maybe, but after training I think I should do some positive work with the media".



Finally, a very positive spin-off for the training was that Liu Dawei who acted as a media trainer and facilitator during the course in China, was delegated to attend to a crisis in Anhui Province where 200 children were reported to have become sick after being injected with an unauthorised vaccine against Hepatitis A. The fact that he had received media training was important for his selection for the job.

The training has several challenges to overcome that could impact on it, namely:

- Some trainees have to face several problems on returning to their countries after the training and their time is short. Limited resources, lack of political support, limited regulatory capacity and conflicting

priorities within the ministry of health have prohibited many of the trainees from putting media plans and immunisation surveillance plans into action.

- The selection of the candidates may not always be spot on. Not everyone that attends deals directly with media. The course is run often with participants from up to six different countries. This means that there is an increased likelihood that cultural differences may play a part in the impact and success of the training.
- Since the SARS outbreak and increasing local and international media scrutiny and activity, there is a heightened appreciation of the need for crisis communication training in China. It could be that the traumatic experience of SARS has motivated participants more than the training could.
- Mehta points out that after the training, certain countries get follow-up visits by the WHO to help them develop their systems further or to evaluate their systems, and very rarely is there communication expertise that goes with those evaluations. There is still very little emphasis placed on evaluating the communication capabilities of an institution by the WHO as a whole because sometimes it's very difficult to do so.
- She adds that in terms of vaccine safety there is emphasis placed, but not enough, on assessing internal and external communication systems for AEFI for vaccines. I think there must be expertise developed by WHO, expert evaluators or people who can go in as media trainers/experts who can help an organisation develop their media plans, their communication strategies not just for vaccination but for public health programmes in general because these are sometimes lacking. It is hard to do and they lack these skills but want them.

Limitations of this research include::

- Potential bias: In that the author of the research is a co-author of the training materials, a trainer and a facilitator for the course. Ushma Metha, who was interviewed for this thesis was the medical trainer and facilitator for the course, as was Cohen, but less so.
- Language: Most of the interviewees had English as a second language and some of the essence of what they were saying could have been lost in translation.

It appears that journalists in developing countries need to be given basic training on how to deal with issues around infectious diseases. Health departments in the various countries could begin to develop relationships with journalists and perhaps host information gathering seminars to inform the media. This is done to great effect by the Department of Health in Sri Lanka.

*Pectus roboret cultus recti*

The WHO media course is, in effect, helping to build capacity in resource-poor countries where media communication training is more than likely to be low on the list of priorities.

Time and resources are already squeezed for addressing major issues like poverty, unemployment, HIV/AIDS and other infectious diseases. It would serve these countries to begin developing ties with the media by offering information sessions on health issues or by being willing to spend some improving relations with the media.

The WHO has not begun to evaluate the media communication training programme for scientists but this thesis is a start and perhaps offer a snapshot of the impact of science communication training programmes.

Duclos (2005) says, the need for an evaluation of the training is becoming more important because 25% of the posts at WHO headquarters are going to be cut. The GTN will then become more regionally based although the core curriculum will be maintained. The evaluation will be more important as the training programme becomes decentralised.

"We will need to strengthen the basis for this course - to have some idea of how it has been received."

Previous studies have recommended that scientists be trained on how to communicate. This study has shown that training contributes greatly to scientists' understanding of the media's role in society and how they need to access the media for their work.

It shows that with training, scientists are willing to put themselves under the microscope to see what they can do to heal the rift between themselves and the media with the public good in mind. Perhaps, in view of burgeoning emerging diseases and the lack of basic resources in many countries, the time for finger-pointing is over and building partnerships where mutual education takes place is the way forward if the lives of people are to be saved and improved.

A final recommendation would be for a more extensive and comprehensive evaluation of the course by WHO.

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<sup>1</sup>It is customary for Chinese people to be addressed by their full names. The author has chosen to abide by this in the text where Chinese interviewees are referred to. In addition the family name is written first followed by the given name. This name order is adhered to in the references.

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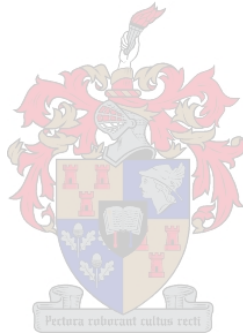


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## **Appendix A**

### **FOCUS GROUP A:**

**Note-taker:** Dr Ushma Mehta: South Africa

**Translator and Interviewee:** Dr Ni Daxin: WHO China office

#### **Dr Tao Lina**

Doctor-in-charge of the Extended Programme on Immunisation (EPI) and EPI surveillance in Shanghai, Jiangsu Province, China.

#### **Professor Diao Linqi**

Assistant Professor of EPI management and Director of the EPI Department at the Centre for Disease Control (CDC) in Henan Province.

#### **Professor Zhuo Jiatong**

Deputy Director: EPI Management at the Guangxi Provincial CDC.

#### **Dr Liu Dawei**

Deputy Director of EPI Division: Surveillance and Management AEFI investigation management at the CDC in Beijing, Hebei Province.

#### **Dr Cui Fuqiang**

Deputy Director: EPI Division of the CDC in Gansu Province.

### **FOCUS GROUP B:**

**Translator and Interviewee:** Dr Ni Daxin of the WHO China office in Beijing.

#### **Dr Zhou Xue**

Group leader in the EPI office in Heilongjiang Province.

#### **Dr Xiong Huiyu**

General staff member in the office of Adverse Drug Reactions (ADR) in Guangdong Province.

**Dr Liu Tao-tao**

General staff member in the ADR office in Guangxi Province.

**Dr Du Wenmin**

Deputy Director of the ADR Monitoring Centre in Shanghai, Jiangsu Province.

**SEMI-STRUCTURED INTERVIEWS**

**Dr Guo Baio**

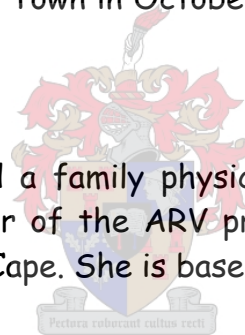
An Epidemiologist at the National EPI office of the CCDC. She attended the training in Colombo, Sri Lanka in 2003.

**Professor Dr Yu Wenzhou**

Assistant Professor: EPI management in the Anhui Provincial CDC. He attended the training in Cape Town in October 2004 and in Lang Fang, China in April 2005.

**Dr Karen Cohen**

A clinical pharmacologist and a family physician, she was until September 2005 the clinical co-ordinator of the ARV programme in the HIV/TB/STI Directorate of the Western Cape. She is based in Cape Town.



**Dr Ushma Mehta**

A clinical pharmacist, she is also the manager of the GTN training centre on AEFI in Cape Town. Dr Mehta is a former head of the National Adverse Drug Reaction Centre housed in UCT's pharmacology Department.

**SEMI-STRUCTURED PHONE INTERVIEWS**

**Dr Alex Dodo**

A Pharmacist (PHd), from Accra in Ghana, he is the co-ordinator for the National Centre for Pharmacovigilance and Director for the Centre of Clinical Pharmacology at the University of Ghana Medical School. He is also a WHO facilitator. He attended the training in Cape Town in August 19- 24 2002.

**Dr Philippe Duclos**

He is a WHO medical officer in Geneva in vaccine assessment and monitoring for the V&B Department. Dr Duclos is project leader for the immunisation safety priority project.

**Mr Han Bin**

A Chinese journalist working on the state-controlled CCTV television channel in Beijing. He has been a health journalist for the past 10 years. He writes everything about the medical sector but in the past decades he has focused on stories about infectious diseases including SARS, HIV/AIDS and avian flu.



## Appendix B

### Questions for focus groups

Have you ever had media training?

Have you been approached by the media for interviews in the past. How often - frequently/infrequently?

Were you contacted by the media during a crisis situation or at any other time? What was your experience of relating to the media. If it was positive, why? If it was a negative interaction, why?

What was your perception of or attitude to the media before receiving the training?

How much knowledge/understanding/awareness of a journalist's job and role in society did you have before the training?

Has your understanding of the media changed in any way, and if so how?

What is your attitude/perception of the media after the training?

What do you think the strengths of the training are?

What do you think the weaknesses of the training are?

How would you change the things that you believe need to be changed?

Should anything be included or should anything be left out?

Will you be able to implement this training? Is it possible?

How does this training differ from other media training you may have had?

What did you think about the style of the training?

Should anything be left out?

What should be included?